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Senate Bill No. 107

I
CHAPTER 1367

An act to amend Section 3502 of the Penal Code, and to add and repeal Section 1706 of the Welfare and Institutions Code, relating to youth, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor October 2, 1989. Filed with Secretary of State October 2, 1989.]

LEGISLATIVE COUNSEL'S DIGEST

SB 107, Presley. Youth: wards: biomedical research.

Existing law prohibits the conduct of any biomedical research on any prisoner in this state.

This bill would allow, until January 1, 1995, research involving the administration of vitamins, minerals, and amino acids to wards, defined to include persons committed to the Department of the Youth Authority, who are 18 years of age or older, and analysis of their hair and blood, if the Department of the Youth Authority approves the research after making a specified determination, the research subjects have given informed consent, the substances administered are limited to those which are approved by the federal Food and Drug Administration and which do not require a physician's prescription, and the substances are administered only within 3 times the Recommended Dietary Allowance, as specified, under the supervision of a physician. The bill would require that protocols for the research conducted pursuant to the above provisions be subject to review and approval by a research oversight committee, as created by the bill. It would prohibit the Department of the Youth Authority from conducting any investigation of a new drug, as defined, without approval from the federal Food and Drug Administration. The bill would provide that its provisions would be repealed as of January 1, 1995.

This bill would declare that it is to take effect immediately as an urgency statute.

The people of the State of California do enact as follows:

SECTION 1. Section 3502 of the Penal Code is amended to read:
3502. Except as provided in Section 1706 of the Welfare and Institutions Code, no biomedical research shall be conducted on any prisoner in this state.

SEC. 2. Section 1706 is added to the Welfare and Institutions Code, to read:

1706. (a) Notwithstanding Section 3502 of the Penal Code, research involving the administration of vitamins, minerals, and amino acids to wards and involving analysis of the subjects' hair and

blood may be conducted provided that the following conditions exist:

(1) The Department of the Youth Authority approves the research after making a determination pursuant to Section 3515 of the Penal Code.

(2) The research subjects have given informed consent under Section 3521 of the Penal Code.

(3) The substances administered in the research are limited to those which are approved by the federal Food and Drug Administration and which do not require a physician's prescription.

(4) The substances are administered only within three times the Recommended Dietary Allowance established by the National Research Council in effect on the effective date of this act under the supervision of a physician.

(5) The withdrawal of blood shall be performed only before commencement and following the conclusion of the research and shall be withdrawn in a medically approved manner. Only a physician, registered nurse, licensed vocational nurse, licensed medical technician, or licensed phlebotomist may withdraw blood specimens for the purposes of this section.

(b) Protocols for the research conducted under this section, and its implementation, shall be subject to review and approval by a research oversight committee. Membership of the committee shall include at least two physicians not employed or on contract to the Department of the Youth Authority or the Department of Corrections, the Chief of Medical Services of the Department of the Youth Authority, a representative from the State Department of Health Services, at least two persons with extensive background in research competent to critique the proposal outlined in this section and assist in its implementation, and a person representing the wards to be selected by the State Public Defender's Office.

(c) As used in this section, "ward" means persons who are committed to the Department of the Youth Authority who are 18 years of age or older.

(d) The Department of the Youth Authority shall not conduct any investigation under this section of a new drug, as defined in Section 201 of the federal Food, Drug and Cosmetic Act (21 U.S.C. Sec. 321) without approval from the federal Food and Drug Administration.

(e) This section shall remain in effect only until January 1, 1995, and as of that date is repealed, unless a later enacted statute, which becomes effective on or before January 1, 1995, deletes or extends that date.

SEC. 3. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

Current law needs to be changed in order to permit a planned research program, authorized by this act, to be implemented at the earliest possible date so that the program may lead to the reduction

— 3 —

Ch. 1367

of violence among incarcerated persons.

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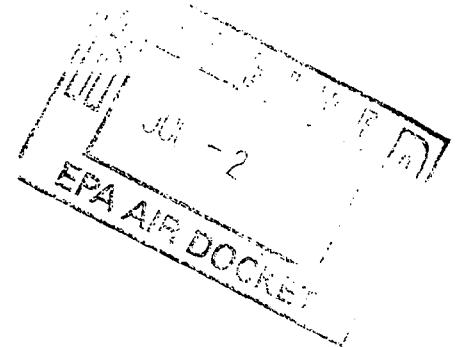
SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF PHARMACOLOGY
COLLEGE OF MEDICINE

IRVINE, CALIFORNIA 92717

JL

December 16, 1988



Mr. Everett L. Hodges
14711 Bentley Circle
Tustin, CA 92680

Dear Red:

This letter summarizes the results obtained from the University of California, Irvine (UCI) research project on "Hair mineral levels in a group of violent prisoners and matched controls." The main hypothesis of the research study was that violent individuals would possess hair mineral patterns different from non-violent controls.

In 1985, UCI and California State University, Stanislaus, obtained from the Deuel Vocational Institute in Tracy, California, hair samples from 107 prisoners and 33 guards. Samples were also obtained from 25 control subjects who resided in the Tracy/Stanislaus areas. These samples ($n = 165$) were drawn equally from Black, Caucasian and Hispanic races. Dr. Rich Haier from the Department of Psychiatry, UCI, in addition, obtained 27 samples from control subjects from the Irvine area.

Dr. Haier coded the samples ($n = 192$) and sent them to the Honorable Warren Knight, retired Superior Court Judge. Judge Knight retained the codes and mailed the samples to Doctors Data in Chicago, Illinois, for analysis by atomic absorption. The data were examined by us, and the following pattern emerged: Hair samples from violent prisoners, in general, possessed higher levels of manganese. Some violent individuals, in addition, possessed higher levels of lead and magnesium.

The prison volunteers were incarcerated at the facility for extended lengths of time. Therefore, it was argued that these observations could have been artifactual, arising from within the institution.

A second study was proposed in 1986. This study paid particular attention to the length of incarceration of the prison inmates. Thirty samples each were obtained by the San Bernardino and the Los Angeles County Sheriff's Department from prisoners who had been recently arrested for a violent crime. The requirements were that samples could only be obtained from volunteers who had been incarcerated for not more than 30 days. UCI gathered an additional 39 samples from a control group. The samples were analyzed by Doctors Data in Chicago, Illinois.

In this study, the data showed a similar trend in hair mineral levels, namely, high manganese, with high lead and magnesium in violent individuals compared to non-violent controls. On close scrutiny of the data, Rebello, et al., observed that a superior discriminant marker appeared to be manganese levels. In particular levels above 0.70 ppm were observed in violent prisoners with greater frequencies. Because these observations were "post hoc", it was proposed to do a third study to test whether or not manganese levels above 0.7 ppm could be used as a marker for violence.

Sheriff Floyd Tidwell of San Bernardino County agreed to provide 30 hair samples from recently-arrested Caucasian volunteers at the San Bernardino jail. Thirty control samples were collected in the San Bernardino area, 15 from the Fullerton area and 15 from the Irvine area. All samples were matched for age and race. The samples ($n = 90$) were delivered to Doctors Data for analysis.

The following table summarizes the results:

TABLE I: SAN BERNARDINO JAIL STUDY

<u>Identity</u>	<u>Total</u>	<u>Marked</u>	<u>Percent</u>
Prisoners	30	9	30
Control	60	3	5

Ratio 6:1

TABLE II: DEUEL PRISON STUDY (September 1985)

<u>Identity</u>	<u>Total</u>	<u>Marked</u>	<u>Percent</u>
Prisoners			
Violent Crime/Violent Inmate	32	21	66
Violent Crime/Non-Violent Inmate	34	22	66
Non-Viol. Crime/Non-Viol. Inmate	41	40	95
Prison Guards	33	7	21
Stanislaus Town Controls	25	1	4
UCI Controls	27	3	11
Subtotal Prisoners	107	83	78
Subtotal Controls	85	11	13

Ratio: 6:1

TABLE II: (Continued)

LOS ANGELES and SAN BERNARDINO JAIL STUDIES - September 1986)

<u>Identity</u>	<u>Total</u>	<u>Marked</u>	<u>Percent</u>
Prisoners - Los Angeles	28	11	39
Prisoners - San Bernardino	32	21	66
Control Group	39	6	15
Subtotal Prisoners	60	32	53
Subtotal Controls	39	6	15

Ratio: 3.5:1

TABLE III: CUMULATIVE OBSERVATIONS

<u>Identity</u>	<u>Total</u>	<u>Marked</u>	<u>Percent</u>
Prisoners	197	124	63
Controls	184	20	11

We believe that hair manganese levels may be an important predictor of violence. These observations should be verified using subjects from other areas of the United States.

We are grateful for your financial support and input throughout the study.

Sincerely,

Tessio Rebello, Ph.D.
Adjunct Assistant Professor

Louis A. Gottschalk, M.D.
Professor

TR:cj

A-90-16

SACRAMENTO UNION
Sunday 10-1-89

Bill targets CYA wards for probes on violence

Can the root causes of violence be detected in one's hair? Could a dietary change have prevented the massacres James Oliver Huberty and Patrick E. Purdy inflicted at a San Ysidro McDonald's and a Stockton schoolyard?

Everett L. "Red" Hodges of Tustin, an independent oil producer, offers a qualified yes to those astounding questions.

Hodges is behind a Senate bill sitting on the governor's desk to allow some 100 violent California Youth Authority adult wards to be voluntarily used as guinea pigs by widely respected California university researchers to test Hodges' theory.

It would be the first such biomedical research using state prisoners or wards since the Legislature banned the practice in 1986. The prohibition was intended to avoid such controversial procedures as sterilization or chemical alteration of one's personality ala "Clockwork Orange."

The legislation, SB107 by Sen. Robert Presley, D-Riverside, authorizes the five-year research project to determine if there is a correlation between violent conduct and abnormal levels of certain vitamins and minerals in their systems and whether normalizing these levels would cut violent behavior in society.

Presley said "preliminary studies in California and elsewhere, including a study involving youths in five states, has shown that a high percentage of violent offenders have substandard levels of essential nutrients, or high levels of such substances as zinc, cadmium, manganese or lead."

"This doesn't prove one causes the other. But examining this premise will be the aim of the project. If there is a correlation, this could be landmark research since we do not have much luck at present in reducing violent conduct in our society," said Presley.

Huberty on a warm July afternoon in 1984 opened fire at a busy McDonald's, killing 21 and wounding 19 before a police sharpshooter's bullet managed to stop the slaughter.

In January of this year, Purdy opened fire at Cleveland Elementary School in Stockton, killing five children and wounding 30 others before killing himself.

A special analysis of Huberty's hair found it to contain extraordinary high levels of the toxic elements lead and cad-



tern previously observed in violent sociopaths."

Reportedly, a similar study is also in the works that would examine a few strands of Purdy's locks. Both men reportedly worked as welders and had guns, both described as potential sources for toxic exposures.

At first Presley and his staff didn't give much credence to Hodges and his theory.

Hodges, buoyed by the dietary corrective changes he saw occur with a problem son, persisted devoting time and money to research efforts in this field.

Presley called him the "catalyst whose unceasing efforts for the past eight years have convinced us that this research needs to be done."

If the study confirms previous research that violent offenders have abnormally high levels of certain trace elements, it will shift into a second phase. That involves giving normal doses of over-the-counter vitamins, minerals and amino acids.

"It is not far-fetched to suggest that we examine possible tie-ins between abnormal substance intake of vitamins and toxic chemicals and the possible impact on the brain as regards violent behavior," said Presley. "It's serious research that needs to be done." The project still needs approval of the federal Food and Drug Administration, which has taken a dim view toward hair research.

If proved true, the ramifications could be staggering.

"I'm waiting for someone to prove me wrong," said Hodges, who is convinced he has stumbled onto something that will really make this a kinder and gentler state and nation.



DOCTOR'S DATA INC.

CONFIDENTIAL

H-90-16

MAY-4

P.O. Box 111 30W101 Roosevelt Rd.
West Chicago, IL 60185 U.S.A.800/323-2784
In Illinois:
312/231-3649

PATIENT: #1111

AGE: 30 SEX: M

DOCTOR: HODGES EVERETT SPED L AFF

ACCT: 18021

LAB NO: 19331-012 DATE IN: 11/27/89 DATE OUT: 12/07/89

DATE SAMPLED:

SHAMPOO: MICHAEL J. WHITE

SAMPLE SIZE: 1.8069

OFFICE CODE: A-02N010

HAIR COLOR: BROWN

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	LOW			REFERENCE RANGE			HIGH			NUMERICAL VALUE OF REFERENCE RANGE
		BELLOW 2 STD. DEV.	TWO STANDARD DEVIATIONS BELOW	ONE STANDARD DEVIATION (STD) BELOW	ONE STANDARD DEVIATION (STD) ABOVE	Two STANDARD DEVIATIONS ABOVE	ABOVE 2 STD. DEV.				
Calcium	122				★+ ★★★★★★★★★★		★★★★★	★★★★★	★★★★★	325	9
Magnesium	87				★★★★★★★★★★					20	1
Sodium	110				★★★★★★★★★★		★★★★★	★★★★★	★★★★★	17	
Potassium	92				★★★★★★★★★★		★★★★★	★★★★★	★★★★★	9	
Copper	15			***						9	
Zinc	157				★★★★★★★★★★					103	1
Iron	.39				★★★★★★★★★★		★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	5	
Manganese	1.38				★★★★★★★★★★		★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	.19	
Chromium	1.05				★★★★					.61	1
Cobalt	.47				★★★★★★★★★★		★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	.12	
Lithium	.304				★★★★★★★★★★		★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	.006	.4
Molybdenum	2.25				★★★★★★★★★★		★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	.20	1
Phosphorus	208				★★★★★★★★★★		★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	108	1
Selenium	.39				★★★★					.20	
Silicon	C	★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★			3	
Vanadium	.36				★★★★★★★★★★		★★★★★★★★★★	★★★★★★★★★★	★★★★★★★★★★	.08	

ADDITIONAL MINERAL LEVELS

Sulfur	53736		★★★★★★★★★★							36404-553
Strontium	4.7				★★★★★★★★★★	★*				.4
Barium	2.7				★★★★★★★★★★	★★★★★				.2
Boron	5.1				★★★★★					1.8
Silver	.34				★★★★★★★★★★					.04
Tin	7				★★★★★★★★★★					1
Zirconium	.99				★★★★★★★★★★	★★★★★★★★★★				.09

GRACE SCHAAR, PH.D. DIRECTOR

Mineral Ratios

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	HIGH		
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN
Lead	7	★★★★★★★★★★	10	
Arsenic	3.8	★★★★★★	••	
Mercury	.4	**	••	
Cadmium	1.5	★★★★★★★★★★	1.10+*	
Aluminum	11	★★★★★★★★★★	15	
Nickel	2.0	★★★★★★★★★★	2.3	
Beryllium	.054	★★★★★★★★★★	0.12+*	

TOTAL TOXICS

SAMPLE CONDITION: NOT SPECIFIED

RACE: CAUCASIAN

HAIR PREPARATIONS: JOHN K. VAN DE KAT

DRINKING WATER SOURCE: NOT SPECIFIED

	LEVEL	REFERENCE RANGE
Ca/Mg	13	4-
Ca/Zn	7.8	2.5- 7
Ca/P	5.9	2.5- 6
Ca/Fe	31	40-
Ca/Mn	8.7	800- 190
Mg/K	.9	1.5- 0
Na/K	1.1	1.5- 4
Zn/K	1	3-
Zn/Cu	10.1	4.0- 12
Cu/Fe	.3	1.2- 3
Fe/Mn	.28	15-
Cu/Cd	1.1	30- 71
Zn/Cd	10.2	300- 360
Se/Hg	.8	.2- 2
Ca/Pb	134	100- 190
P/AI	18.8	20.0- 360

... late this occurred in several parts of the country.

Perhaps not surprisingly, both the investigators who support and those who oppose the idea of an estrogen-cancer link manage to interpret this downturn in favor of their own theory. The supporters suggest that the downturn reflects the decreased use of estrogens occurring as a result of the reports that the drugs cause endometrial cancer. The decrease occurred very rapidly, but this is consistent with the possibility that estrogens are tumor promoters rather than true carcinogens as some investigators propose. Tumor promoters do not cause cancer by themselves but speed up the development of tumors initiated by carcinogens (*Science*, 11 August, p. 515). The effects of promoters are reversible, at least up to a point, and the tumors do not develop if exposure to the promotor stops before this point is reached.

In contrast to this point of view, Horwitz and Feinstein propose that the increase in endometrial cancer was itself the result of increased detection. More D & C's and hysterectomies have been performed in the past decade or so and this would lead to more endometrial cancers being found. Now that the excess cancers have been detected, the incidence of disease is returning to its true level.

At present, seven epidemiological studies favor a link between estrogens and endometrial cancer. Five of the seven studies have been published and two are in press at the *New England Journal of Medicine*. Because two earlier studies, which were performed in a manner similar to that advanced by Horwitz and Feinstein, also discount the existence of the link, the score now stands at seven to three in favor of a causal connection between estrogens and endometrial cancer.

But Horwitz and Feinstein quote the late epidemiologist Harold Dorn on epidemiological research of this type. Dorn said: "reproducibility does not establish validity, since the same mistake can be made repeatedly," an argument that can also be cited by the other side in this dispute.

As a result of the reports linking estrogen use to endometrial cancer, the Food and Drug Administration currently requires that the label for the drugs carry a warning that they are associated with an increased risk of the cancer; the label also advises physicians to prescribe estrogen in the lowest doses and for the shortest time required to control menopausal symptoms in order to minimize that risk. The FDA is reviewing the work of Horwitz and Feinstein, a process that should take about a month, to determine whether a change in the policy on estrogen use is warranted.—JEAN L. MARX

Hair: A Diagnostic Tool to Complement Blood Serum and Urine

Hair has the potential to become a remarkable diagnostic tool. It is easily collected without trauma on the part of the donor, it can be stored without deterioration, and its contents can be analyzed relatively easily. Trace elements, in particular, are accumulated in hair at concentrations that are generally at least ten times higher than those present in blood serum or urine and may provide a continuous record of nutritional status and exposure to heavy metal pollutants. Some drugs have already been shown to accumulate in hair, and it seems likely that other organic chemicals may be identified there when sufficiently accurate analytical techniques are developed. Hair analysis thus promises to be an ideal complement to serum and urine analysis as a diagnostic tool.

Much of the original interest in analysis of hair involved its application to forensic science. Early investigators hoped that measurement of the concentrations of 10 to 15 trace elements in hair might make it possible to link a hair sample obtained at the scene of a crime with a specific individual. Subsequent work has shown that hair analysis has limited forensic value; profiles of trace element concentrations vary significantly in hairs collected from different parts of the head, and profiles obtained with many hairs change appreciably with time. In the process, though, investigators found

that hair analysis can indicate exposure to certain pollutants and can serve as a probe of physiological functions.

The best results have been obtained with heavy metal pollutants such as lead, arsenic, cadmium, and mercury. Several investigators in Japan, Sweden, Canada, and the United States have shown that concentrations of these elements in the hair provide an accurate and relatively permanent record of exposure, and that there is a good correlation between concentrations in hair and concentrations in internal organs. Typical examples of such measurements were provided by Amares Chattopadhyay of Dalhousie University at the Second Human Hair Symposium, which was held in October in Atlanta.

Chattopadhyay found, for example, that the concentration of lead in hair was lowest in rural population groups, higher in urban groups, and highest in individuals who live close to lead smelters. These differences are presumed to reflect differing exposures to lead in automobile exhaust, paint, and industrial emissions. He also observed the highest concentrations of mercury and cadmium in hair from individuals with known exposure to the metals. Similar results have been reported by other investigators, but the absolute concentrations reported differ appreciably because of differences in technique (see box). Chat-

topadhyay and others have also shown that the approximate time of occurrence of short, intense exposures to heavy metals can be determined by sectioning hairs along their length and analyzing each section.

Several groups are thus compiling baseline data about normal concentrations of trace elements so that hair analysis can be used to monitor exposure to pollutants. The most notable effort is that of the International Atomic Energy Agency (IAEA) in Vienna. Yu S. Ryabuhin of the IAEA is collecting analytical data on more than 40 elements from laboratories in 13 countries. Several individual investigators are doing the same thing on a smaller scale. Still others, such as Harold G. Petering of the University of Cincinnati College of Medicine, are feeding the heavy metals to animals in measured quantities and monitoring concentrations in hair in an effort to correlate exposure and concentrations.

Animal hair might also be used to monitor environmental pollutants. Norman F. Mangelson and his colleagues at Brigham Young University, for example, are analyzing trace element concentrations in the hair of rodents collected in Utah's Lake Powell Recreation Area, the site of a proposed coal-fired power plant. Once they have established baseline concentrations, they plan to contin-

Growing Pains for a New Field

The science of hair analysis has undergone several growing pains, due, in large part, to the failure of early investigators, in their seeming haste to produce useful results, to develop or adopt uniform procedures for collecting, preparing, and analyzing hair. In consequence, measurements made in any laboratory today can generally be assumed to be accurate, but comparisons of data obtained from different laboratories often show large variations in absolute values. There is, furthermore, little agreement about precisely what constitutes normal concentrations of trace elements in hair. Until this situation is corrected, advancements in the field will be impeded. Fortunately, some corrective measures are being taken.

One of the principal problems of hair analysis—also one of its chief advantages—is the accessibility of hair to the external environment. Air and water deposit many trace elements on the surface of hair; sweat does the same. Grooming habits compound the problem. Some antidandruff shampoos, for example, contain zinc or selenium and some hair sprays contain manganese and other metals. Many of these elements may become irreversibly bound to the hair.

Thus, notes Adon A. Gordus of the University of Michigan, the concentration of many elements increases with increasing distance from the scalp and there may be as much as a 30-fold difference in concentration of some elements between opposite ends of hair strands. The problem can be minimized by analyzing only the portion of the hair closest to the scalp, and most investigators now do this: some data produced earlier, however, are not consistent with current data because this restriction was not observed.

A more severe problem is the removal of external contaminants. The obvious solution is to wash the hair before analysis, but there is no consensus about how this should be accomplished. Some laboratories wash hair in distilled water, some use detergents, some use a combination of aqueous detergents and organic solvents, and still others use chelating agents to trap metal ions. Data indicating the effects of these washing procedures are scant, but it is clear that the different procedures remove different contaminants and different proportions of trace elements. Washing procedures are a major source of inconsistencies among laboratories and, at present, there appears to be no agreement about which should be adopted universally.

The actual hair analysis is generally performed by neutron activation analysis, photon activation analysis, atomic absorption spectrometry, or particle-induced x-ray emission analysis. Each of these is highly sensitive and can detect very small quantities of many elements in hair. Comparisons of results obtained with the different techniques are reliable, however, only if there are standard reference materials with which to calibrate the instruments. At present, there are no such materials, but the International Atomic Energy Agency—which is particularly interested in nuclear techniques for hair analysis—is attempting to develop some. If such standards become available, and if investigators can be induced to use a standard method for sample preparation, results should become more consistent.

Another problem results from the preliminary successes already achieved through hair analysis. Commercial laboratories that perform hair analyses are springing up throughout the country, but particularly on the West Coast. These laboratories, Gordus says, often produce elaborate and impressive computer printouts that would seem to indicate the nutritional status of the client—despite the fact that the technique has never been demonstrated to be effective for this purpose.

In most cases, therapies proposed on the basis of hair analysis appear to involve relatively harmless dietary supplementation with, for example, zinc or other essential elements. In some cases, though, chelation therapy has been suggested for clients whose hair shows slightly above-normal concentrations of toxic heavy metals. Chelating agents, which bind to metal ions to speed their elimination from the body, can also remove essential metals, and, however, their use is generally recommended by physicians only in cases of exceptionally high exposure. Many investigators thus think that the operations of such laboratories should be severely restricted.—T.H.M.

use testing rodent hair to monitor potential emission of pollutants by the power plant.

Unusual concentrations of trace elements in hair may also provide a tool for the diagnosis and therapy of diseases. Harry Shwachman of the Children's Hospital Medical Center in Boston and Louis Kopito of the Massachusetts Institute of Technology, for instance, have shown that children with cystic fibrosis have as much as five times the normal concentration of sodium in their hair, but only about 10 percent of the normal concentration of tightly bound calcium. Analysis of these two elements in hair, Shwachman says, is thus a useful tool both for screening for cystic fibrosis and for assisting in diagnosis of the disease.

Shwachman and Kopito have also found that there is less sodium than potassium in the hair of patients with celiac disease, a disorder in the digestion and utilization of fats: there is generally three to four times as much sodium as potassium in the hair of healthy individuals. The ratio of sodium to potassium returns to normal with improvement in the condition, so it is a potentially useful monitor of therapy. They have also shown that hair from victims of phenylketonuria, an inborn error of metabolism, contains below-normal concentrations of magnesium and much-below-normal concentrations of calcium, and that hair from victims of a severe protein-calorie malnutrition known as Kwashiorkor has markedly increased concentrations of zinc.

Several investigators, such as Ananda S. Prasad of the Wayne State University Medical School and Petering, have shown that marginal zinc deficiencies in the diet can be identified by below-normal concentrations of zinc in hair. (Severe zinc deficiencies are generally characterized by extensive loss of hair, but the little hair that does grow contains normal concentrations of zinc.) Such deficiencies can produce retardation of both growth and sexual maturation. They may occur more often than has been expected, according to K. Michael Hambridge of the University of Colorado Medical Center, because diets of many low-income people provide relatively little zinc.

Hambridge tested children in Denver's Head Start program—which is designed to assist children from low-income families—and found that both their hair and blood serum contained significantly lower concentrations of zinc than specimens from children of middle-income families. In general, the lowest concen-

of the children with the lowest zinc concentrations in their hair for further testing and found that taste perception was impaired in five. Addition of small zinc supplements to the children's diets restored their taste perception and increased zinc concentrations in their hair to normal.

Other investigators, such as Delbert J. Eatough of Brigham Young University, have found that iron deficiencies can be detected by hair analysis. This application appears to have less value, however, since the normal concentration of iron in the blood is relatively high and alternative techniques for monitoring iron deficiencies are already in widespread use.

Another area of interest is the relation between sugar metabolism and chromium. Hambidge and Walter Mertz of the U.S. Department of Agriculture in Beltsville, Maryland, have independently demonstrated below-normal concentrations of chromium in the hair of victims of juvenile-onset diabetes. This finding is supported by biochemical evidence that demonstrates low concentrations of chromium in the blood of some patients with juvenile-onset diabetes. Interestingly, Eatough and his colleagues have shown that chromium concentrations are normal in the hair of maturity-onset diabetics from the Pima Indian nation, which has a very high incidence of diabetes. Most diabetologists now believe that juvenile- and maturity-onset diabetes have different causes, and this finding appears to support that conclusion.

To further delineate this relation, Emily Sheard and Richard Carter of the Clinical Chemistry division of the Center for Disease Control (CDC) have been developing a standarized technique for measuring chromium in hair. The CDC is the central laboratory for the National Center for Health Statistics' Health and Nutrition Examination Survey (HANES). In the current phase of HANES, data are being collected from some 21,000 individuals to provide statistical data about normal health; glucose tolerance tests will be conducted on a third of the individuals. Sheard and Carter hope to persuade the investigators also to collect hair samples from each of these individuals so that chromium concentrations can be correlated with the results of glucose tolerance tests. If the initial results are confirmed, hair analysis might provide a useful tool for screening for diabetes.

One of the more controversial aspects of hair analysis involves the relation be-

telligence or learning ability. One of the first indications of a link was obtained in 1973 when Adon A. Gordus of the University of Michigan reported that the hair of students with high academic marks contains substantially more zinc and copper and less iodine, lead, and cadmium than the hair of students with low marks. Subsequent work by Gordus has shown that the differences are not so pronounced as they were first thought to be, but are nonetheless real. Gordus notes that the literature contains much data indicating an association between zinc deficiencies and learning deficits in rodents.

Link to Learning Disabilities

Last year, Robert O. Pihl and his colleagues at McGill University reported that they could distinguish between normal children and those with learning disabilities with 98 percent accuracy by analyzing concentrations of 14 elements in hair. Particularly important in the differentiation, they found, were increased levels of lead, cadmium, and manganese, and reduced levels of lithium and chromium. A follow-up study of these children after 2 years of behavioral and nutritional therapy, Pihl told the symposium, indicated that both their behavior and the trace element profile in their hair had returned almost to normal. Pihl and others are now attempting to reproduce these results, but Pihl, at least, has encountered some methodological problems in the analytical procedure. In his most recent studies, however, he also has observed an association between low zinc concentrations in hair and certain types of learning disabilities.

P. J. Barlow of the University of Aston in Birmingham, England, and M. Kapel of the University of Leeds have observed a relation between trace element profiles in hair and four different types of mental abnormality. In hair from 67 women with Down's syndrome, also known as Mongolism, they observed below-normal concentrations of calcium, copper, and manganese (some other abnormalities in the hair appeared to be related to environment). Low concentrations of calcium had previously been observed in the blood of Down's patients.

In hair from 37 patients with schizophrenia, Barlow and Kapel observed below-normal concentrations of cadmium and manganese, and above-normal concentrations of lead and iron. The low manganese may be particularly important, Barlow told the hair symposium, because some reports suggest that manganese chloride may be effective in ther-

apy for schizophrenia. In hair from a group of 25 severely subnormal young people in a hospital in Denmark, the two investigators observed below-normal concentrations of manganese, iron, lead, and copper, and above-normal concentrations of zinc. And, finally, in hair from five patients with ataxia telangiectasia, they observed low concentrations of copper. This hereditary disease is manifested in a number of symptoms, including mental retardation, enhanced susceptibility to damage from radiation, and enhanced susceptibility to damage from x-rays. The low concentrations of copper may be particularly relevant, Barlow says, because copper is involved in DNA repair mechanisms.

The utility of hair analysis has been expanded somewhat by Peter F. Jones and Annette M. Baumgartner of The Aerospace Corporation in Los Angeles and Werner Baumgartner of the Los Angeles Veterans Administration Hospital. Previous investigators had shown, using relatively insensitive techniques, that barbiturates, amphetamines, and dopesines can be detected in animal hair if large enough amounts of hair are used. The Los Angeles investigators used the more sensitive technique of radioimmunoassay to extend these results to humans. In their initial studies, they demonstrated that morphine is present at concentrations of 1 to 10 nanograms per milligram in the hair of mice that had previously been injected with the drug. They also found that the drug remains in the hair for at least 3 months after injection and that, by sectioning the hair lengthwise, it is possible to tell approximately when the drug was injected. Subsequent studies among patients at a drug abuse clinic indicated the presence of heroin metabolites in hair samples from each of 60 patients who admitted prior drug use. Conventional urinalysis indicated the presence of the drug in only 30 percent of the patients—an indication that 70 percent of the subjects had used the drug at least 2 days prior to specimen collection.

Jones and Baumgartner are now trying to develop similar assays for barbiturates and amphetamines, and Jones thinks it possible that there may be many other organic chemicals locked into hair. They are thus trying to adapt highly sensitive chromatography-mass spectrometry techniques to the study of hair in the hope that other drugs of abuse, chemotherapeutic agents, and perhaps even biochemical intermediates may be detected. If this should be the case, a completely new dimension of hair analysis will be opened.—THOMAS H. MAUGH II

A-90-16

IV-F-4



AIBR Life Sciences Division
American Institute for Biosocial Research, Inc
P. O. Box 1174
Tacoma, WA 98401-1174 USA
(206) 272-0728

~~CONFIDENTIAL~~

Hello Red,

These are Alex's orginals. He asks that these be for
your eyes only until contact with "the judge". Please
return registered mail.

Alice

The City Court of the City of Baker

East Baton Rouge Parish, La.

JUDGE
BRYANT W. CONWAY

August 18, 1984

POST OFFICE BOX 1
BAKER, LA 70704-0001

MARSHAL
S.J. GAUTREAUX, III

CLERK OF COURT
GARNET R. FARRIS

Dr. Alexander Schauss
P.O. Box 1174
Tacoma, Washington 98401

Dear Dr. Schauss:

Judge Conway asked me to send you the attached files that are more complete data on the chemical analysis studies being done. He also asks that they be treated as semi-confidential materials.

The Judge is busy campaigning and enjoying a little vacation time.

Sincerely,

Garnet Farris
Garnet Farris,
Clerk of Court

Encls.

P.O. Box 111 30W101 Roosevelt Rd.
West Chicago, IL 60185 U.S.A.

800/323-2784
In Illinois:
312/231-3649

PATIENT:
DOCTOR: TILTON KERRI
LAB NO: 84131-0185 DATE IN:

AGE: 23 SEX: F
ACCT: 12765
DATE OUT: 05/11/84

DATE SAMPLED: 05/08/84
OFFICE CODE: A-02N

SHAMPOO: PRELL
HAIR COLOR: BLOND

SAMPLE SIZE: 400

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	REFERENCE RANGE			NUMERICAL VALUE OF REFERENCE RANGE	
		BELLOW 1 STD DEV.	TWO STANDARD DEVIATIONS BELOW	ONE STANDARD DEVIATION 1 STD BELOW	ONE STANDARD DEVIATION 1 STD ABOVE	TWO STANDARD DEVIATIONS ABOVE
Calcium	1471					325-
Magnesium	124					32-
Sodium	348					27-
Potassium	35					1.1-
Copper	14		*****			1.1-
Zinc	126		*****			124-
Iron	18		*****			5-
Manganese	1.279		*****			2.7-1
Chromium	1.08		*****			.61-1
Cobalt	.26		*****			.12-
Lithium	.099		*****			.006-
Molybdenum	1.15		*****			.20-1
Phosphorus	.90		*****			.108-
Selenium	1.55		*****			.16-
Silicon	10		*****			4-
Vanadium	.27		*****			.08-

ADDITIONAL MINERAL LEVELS

Sulfur	35643	*****	35836-468
Strontrium	9.6	*****	.4-4
Barium	8.0	*****	.2-1
Boron	2.0	***	.9-3
Gold	.45	*****	.05-
Silver	.17	***	.08-
Tin	10	*****	1-
Antimony			
Tungsten			
Zirconium	.39	*****	.09-

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	REFERENCE RANGE	
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN
Lead	20	*****	15*
Arsenic	2.8	****	7.0
Mercury	1.3	****	2.5
Cadmium	2.1	*****	1.0*****
Aluminum	10	****	130
Nickel	1.3	*****	2.2
Beryllium	.024	***	.1

TOTAL TOXICS

RACE: CAUCASIAN

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

Lab Procedures According to ASETL Protocol

Laboratory Work Performed By Doctor's Data Laboratory

HIGH
MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN

TEST	LEVEL	REFERENCE RANGE
Ca/Mg	11	5-1
Ca/Zn	11.6	2.3-6
Ca/P	16.2	2.2-6
Ca/F	78	22-114
Ca/Mn	114	302-209
Mg/K	3.5	.7-9
Na/K	9.9	1.3-5
Zn/K	3	3-11
Zn/Cu	8.6	4.0-10.6
Cu/Fe	.7	.7-4.3
Fe/Mn	1	7-42
Cu/Cd	6	3.1-16.3
Zn/Cd	5.9	249-1023
Se/Iod	1.17	.14-.63
Ca/Pb	70	5.9-224
P/A150		

SAMPLE CONDITION: NORMAL

John F. Edwards, R.D.L.

Baron of Orleans
Baton Rouge, LA

SID 4078578/PAGE 001

LOUISIANA STATE POLICE

CONFIDENTIAL RECORDS

*FOR USE BY AUTHORIZED CRIMINAL JUSTICE AGENCIES ONLY!
(FINGERPRINTS ARE NECESSARY FOR A POSITIVE ID)

CRIMINAL RECORD OF
STATE ID #4078578

LA STATE DR LIC

SSN 8435-34-4244 B1999645

BIRTH DATE-09-01-60 PLACE-NY

RACE-W HGT-5'06" HAIR-BLQ EPH-48 L 47 R 111 44

SEX -M WGT-145lb EYES-BLU H 4 R 110 44

**

*DATE-09/16/80 NAME -

*LID -3798 AGENCY-PD BERWICK LA

*CHARGE STATUS COUNTS CNV DISP

RECEIVING STOLEN THINGS

1 0 FORFEITED BOND

**

*DATE-03/24/81 NAME -

*LID -78502 AGENCY-PD BATON ROUGE LA

*CHARGE STATUS COUNTS CNV DISP

CONTempt OF COURT

1 0

**

*DATE-03/22/81 NAME -

*LID -182736 AGENCY-SU BATON ROUGE LA

*CHARGE STATUS COUNTS CNV DISP

FUG. FROM BRCPD

1 0

COURT FDI

0 0

**

*DATE-07/03/81 NAME -

*LID -485541 AGENCY-SU BATON ROUGE LA

*CHARGE STATUS COUNTS CNV DISP

CRIMINAL TRESPASS

1 0

Poss. of MARIJUANA

1 0

CDP'D

0 0

**

*DATE-05/18/82 NAME -

*LID -000451 AGENCY-SU BATON ROUGE LA

*CHARGE STATUS COUNTS CNV DISP

SPEEDING

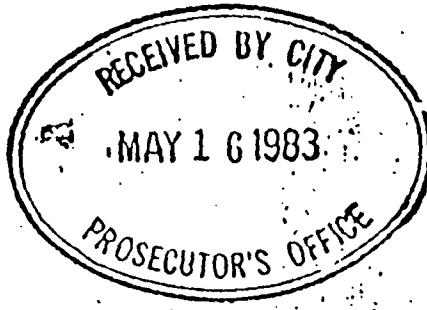
1 0

DRIVING UNDER SUSPENSION

1 0

DRIVING WHILE INTOXICATED

1 0



SID: 1078578/PAGE 001

Warrant of Criminal
Baton Rouge, LALOUISIANA STATE POLICE
CONFIDENTIAL RECORDS
*FOR USE BY AUTHORIZED CRIMINAL JUSTICE AGENCIES ONLY!
(FINGERPRINTS ARE NECESSARY FOR A POSITIVE ID)CRIMINAL RECORD OF
STATE ID #1078578SSN 8435-34-4244 EA. STATE DR LIC
BIRTH DATE-09-01-60 PLACE-NY 8435-34-4244
RACE-W HGT-5'06" HAIR-BL0 FPN-18 L 17 W 111 14
SEX -M WGT-145# EYES-BLU R 110 14

**

*DATE-09/16/80 NAME -

*LID -3798

AGENCY-PD BERWICK LA

*CHARGE RECEIVING STOLEN THINGS STATUS

COUNTS CNV DISP

1 0 FORFEITED BOND

*DATE-03/24/81 NAME -

*LID -78502

AGENCY-PD BATON ROUGE LA

*CHARGE CRIMINAL OF COURT

STATUS

COUNTS CNV DISP

1 0

*DATE-03/22/81 NAME -

*LID -182736

AGENCY-SU BATON ROUGE LA

FDC FROM BRCPD
CHARGE PDJ

STATUS

COUNTS CNV DISP

1 0

*DATE-07/05/81 NAME -

*LID -485541

AGENCY-SU BATON ROUGE LA

*CHARGE CRIMINAL TRESPASS
POSSESS MARIJUANA
DRUGS

STATUS

COUNTS CNV DISP

1 0

*DATE-05/18/82 NAME -

*LID -000151

AGENCY-SU BATON ROUGE LA

*CHARGE SPEEDING
DRIVING UNDER SUSPENSION
DRIVING WHILE INTOXICATED

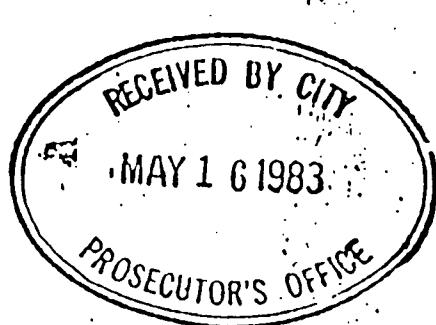
STATUS

COUNTS CNV DISP

1 0

1 0

1 0



AGGRAVATED ASSAULT

**

*DATE-11/09/81 NAME
 *LID-84218 AGENCY-PD BATON ROUGE LA
 CONTEMPT OF COURT STATUS COUNTS DISP

**

*DATE-09/03/82 NAME
 *LID-84218 AGENCY-PD BATON ROUGE LA
 MISD-THEFT STATUS COUNTS DISP

**

*DATE-03/03/83 NAME
 *LID-4445 AGENCY-SO BATON ROUGE LA
 CHARGE CRIM DANG TO COIN STATUS COUNTS DISP

**

*DATE-10/06/83 NAME
 *LID-906654 AGENCY-SO BATON ROUGE LA
 AGGRAVATED ASSAULT STATUS COUNTS DISP

**

*CHARGE SIMPLE_BATTERY STATUS COUNTS DISP
 DISTURBING THE PEACE
 CRIM. DAMAGE TO PROPERTY

**

*CHARGE CRIM. DAMAGE TO PROPERTY STATUS COUNTS DISP
 BAKERJ

**

*DATE-10/10/83 NAME
 *LID-84248 AGENCY-PD-BATON-ROUGE LA
 CONTEMPT OF COURT STATUS COUNTS DISP
 END-OF-TEXT

Louisiana State Police
Bureau of Criminal Identification
Baton Rouge, Louisiana

PSID 0535985/PAGE 002

*DATE-03/28/77 NAME -

*LID - 144545 AGENCY-SO BATON ROUGE LA
CHARGE DRIVING WHILE WBR PARISH STATUS COUNTS

DISP

*Fight
Did not
it too cool
charges
Dropped*

*DATE-04/02/77 NAME -

*LID - 144680 AGENCY-SO BATON ROUGE LA
CHARGE DRIVING WHILE INTOXICATED STATUS COUNTS

DISP

*Licence
Revoked -
paid fine*

*DATE-03/10/78 NAME -

*LID - 153504 AGENCY-SO BATON ROUGE LA
CHARGE DRIVING CONT. OF CITY STATUS COUNTS

DISP

*3-23-78 DEFENDANT
APPEARED, & COURT
SENTENCED DEFENDANT
TO PAY A FINE OF
\$25, COURT COSTS
\$15*

*DATE-06/05/81 NAME -

*LID - 14688 AGENCY-SO AMITE LA
CHARGE POSS WITH INTENT DIST MARIJ STATUS COUNTS

DISP

*arrested
dropped*

*DATE-06/09/83 NAME -

*LID - 39851 AGENCY-PD, BATON ROUGE LA
CHARGE RAN RED LIGHT STATUS COUNTS

DISP

*charges
Reduced*

END.

*miss up
on computer*

P.O. Box 111 30W101 Roosevelt Rd.
West Chicago, IL 60185 U.S.A.

800/323-2784
In Illinois:
312/231-3649

PATIENT:

DOCTOR: TILTON KERRI

LAB NO: 84053-0128

AGE: 38 SI

ACCT: 127

DATE SAMPLED: 02/10/84

OFFICE CODE: A-02N

SHAMPOO: FABERGE ORGANICS

HAIR COLOR: BLACK

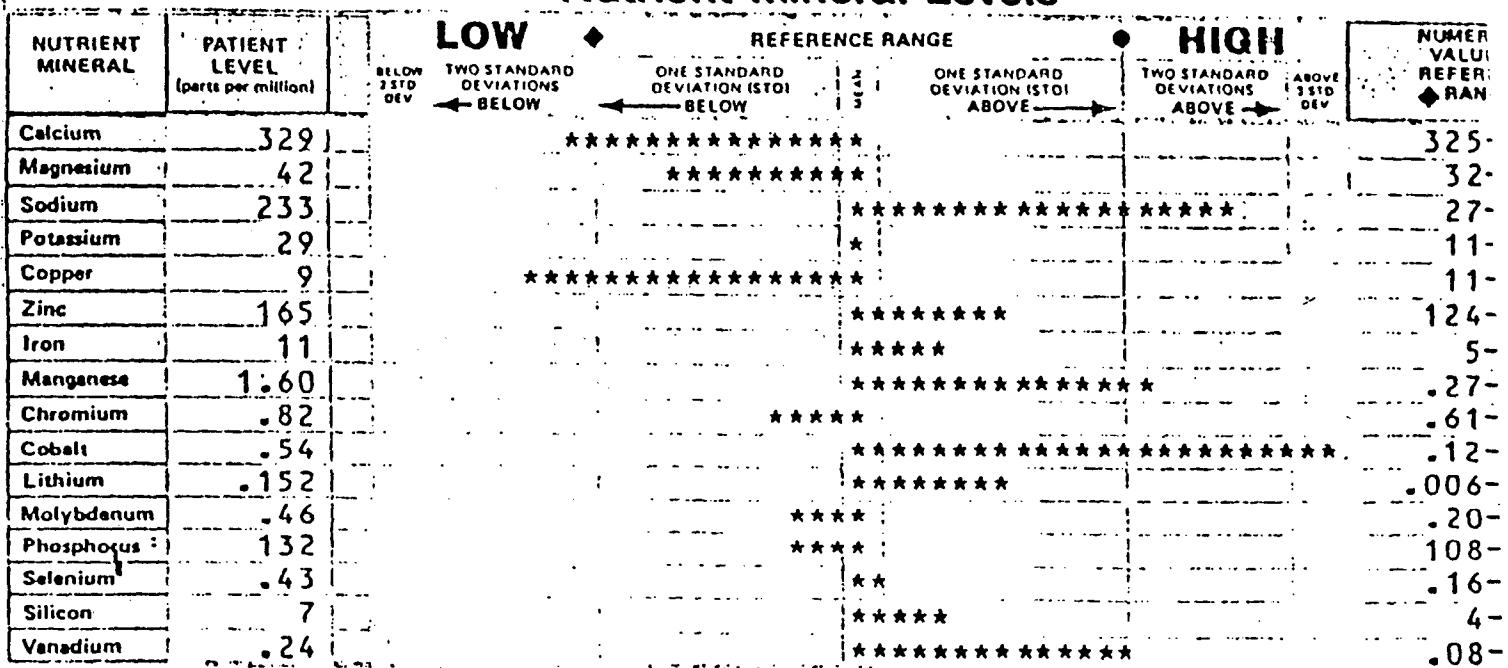
DATE IN: 02/22/84

DATE OUT: 02/22/84

SAMPLE SIZE: .330

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels



ADDITIONAL MINERAL LEVELS

Sulfur	45106	*****	35836
Strontium	2.4	*****	.4
Barium	1.8	*****	.2
Boron	4.6	*****	.9
Gold	.17	***	.05
Silver	.25	*****	.08
Tin	4	**	1
Antimony			
Tungsten			
Zirconium	.19	**	.09

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	REFERENCE RANGE		
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN
Lead	3	***	15	
Arsenic	1.8	***	7.0	
Mercury	1.7	*****	2.5	
Cadmium	.6	*****	1.0	
Aluminum	3	**	30	
Nickel	1.1	*****	2.2	
Beryllium	.061	*****	.1	
TOTAL TOXICS		*****	*****	*****

RACE: CAUCASIAN

SAMPLE CONDITION: NORMAL

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

Lab Procedures According to ASET Protocol

Mineral Ratio

	LEVEL	REFERENCE
Ca/Mg	7	5
Ca/Zn	1.9	2.3
Ca/P	2.4	2.2
Ca/Fe	28	22
Ca/Mn	204	302
Mg/K	1.4	.7
Na/K	7.8	1.3
Zn/K	5	3
Zn/Cu	16.6	4.0
Cu/Fe	.8	.7
Fe/Mn	7	7
Cu/Cd	16	31
Zn/Cd	275	249
Se/Hg	.24	.14
Cu/Pb	88	59

P.O. Box 111 30W101 Roosevelt Rd.
West Chicago, IL 60185 USA

000/323-2784
In Illinois:
312/231-3649

PATIENT:

DOCTOR: TILTON KERRI

LAB NO: 84053-0127 DATE IN: 02/22/84

AGE: 25 SEX:

ACCT: 12765

DATE SAMPLED: 02/18/84

DATE OUT: 02/23/84

OFFICE CODE: A-02N

SHAMPOO: FABERGE ORGANICS

SAMPLE SIZE: .360

HAIR COLOR: BLOND

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	LOW		REFERENCE RANGE		HIGH		NUMERICAL VALUE OF REFERENCE RANGE
		BELOW 2STD DEV	TWO STANDARD DEVIATIONS BELOW	ONE STANDARD DEVIATION IS TOI BELOW	ONE STANDARD DEVIATION IS TOI ABOVE	ABOVE 2STD DEV		
Calcium	2334				*****	*****	*****	393-.1
Magnesium	112			*****	*****	*****		39-
Sodium	283			*****	*****	*****		19-
Potassium	30			*****	*****	*****		9-
Copper	.41			*****	*****	*****		13-
Zinc	148			*****	*****	*****		128-
Iron	22			*****	*****	*****		6-
Manganese	6.66			*****	*****	*****		.30-
Chromium	.37	*****	*****	*****	*****	*****		.61-.1
Cobalt	.42	*****	*****	*****	*****	*****		.12-
Lithium	.123	*****	*****	*****	*****	*****		.006-
Molybdenum	.74	*****	*****	*****	*****	*****		.19-.1
Phosphorus	.75	*****	*****	*****	*****	*****		.94-
Selenium	.28	*****	*****	*****	*****	*****		.16-
Silicon	5	*****	*****	*****	*****	*****		4-
Vanadium	.30	*****	*****	*****	*****	*****		.09-

ADDITIONAL MINERAL LEVELS

Sulfur	43731	*****	*****	*****	*****	*****	32760-51
Strontium	10.5	*****	*****	*****	*****	*****	.7-.1
Barium	6.6	*****	*****	*****	*****	*****	.3-
Boron	2.7	*****	*****	*****	*****	*****	.9-
Gold	.64	*****	*****	*****	*****	*****	.06-
Silver	.25	*****	*****	*****	*****	*****	.10-
Tin	14	*****	*****	*****	*****	*****	2-
Antimony							
Tungsten							
Zirconium	.69	*****	*****	*****	*****	*****	.12-

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	HIGH		
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN
Lead	16	*****	15	
Arsenic	2.9	*****	7.0	
Mercury	2.4	*****	2.5	
Cadmium	2.1	*****	1.0	*****
Aluminum	12	*****	30	
Nickel	5.1	*****	2.2	*****
Beryllium	.068	*****	.1	

TOTAL TOXICS

RACE: CAUCASIAN

SAMPLE CONDITION: NORMAL

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

Mineral Ratios

	LEVEL	REFERENCE RANGE
Ca/Mg	20	6-.1
Ca/Zn	15.7	2.5-.7
Ca/P	30.9	2.7-.9
Ca/Fo	104	33-.14
Ca/Mn	350	470-.244
Mg/K	3.7	.9-.10
Na/K	9.3	1.4-.5
Zn/K	41	3-.1
Zn/Cu	3.5	4.1-.10
Cu/Fo	1.8	.9-.5
Fe/Mn	3	6-.30
Cu/Cd	18	37-.201
Zn/Cd	67	289-.127
Se/Hg	.11	.13-.58
Ca/Pb	141	78-.348
P/AI	5	1714-.445

The following is the record of State Police No. 969 522
S. B. I. No.

Louisiana State Police
Bureau of Criminal Identification
Baton Rouge, Louisiana

CONTRIBUTOR OF FINGERPRINTS	NAME AND NUMBER	ARREST OR RECEIVED	CHARGE	DISPOSITION
Washington Rand Evansport, La.		1-5-68 FP	applicant	
Baton Rouge, La.		1-15-71 FP	applicant	
Baton Rouge, La.		11-12-74 prt rec	applicant	
Baton Rouge, La.		11-15-77	contempt of court, driving u/revocation	Dist. - the Peace

NOTICE

DISSEMINATION OF INFORMATION OBTAINED FROM LOUISIANA STATE POLICE RAP SHEETS AND LOUISIANA STATE POLICE CRIMINAL RECORDS FILES TO AGENCIES OTHER THAN CRIMINAL JUSTICE AGENCIES IS NOT AUTHORIZED BY THE STATE POLICE AND THAT PERSON AND AGENCY MAKING SUCH DISSEMINATION MUST ASSUME FULL RESPONSIBILITY FOR ANY UNAUTHORIZED DISSEMINATION.

tion of our records, please supply disposition to this Department in any of the foregoing cases where it does not appear.
 * Represents notations unsupported by fingerprints. LR

west Chicago, IL 60185

W.I.S.A.

ILLINOIS
312/231-3649

SECTION: SECTION KERRI

LAB NO: 84053-0124 DATE

DATE SAMPLED: 02/10/

OFFICE CODE: A-02N

SHAMPOO: SUAVE

HAIR COLOR: BLACK

CAB NO: 84053-0124 DATE IN: 02/22/84 | DATE OUT: 02/

SAMPLE SIZE: 100

DATE OUT: 02/

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	NUTRIENT LEVELS			HIGH REF
		LOW ◆ BELOW 2 STD DEV ← BELOW	REFERENCE RANGE ONE STANDARD DEVIATION (STD) BELOW	HIGH ◆ TWO STANDARD DEVIATIONS ABOVE → ABOVE 2 STD DEV	
Calcium	693			*****	3
Magnesium	58			★	2
Sodium	158			*****	2
Potassium	34			★	1
Copper	10	*****	*****		1
Zinc	166			*****	12
Iron	10			★	6
Manganese	2.21			*****	.2
Chromium	.36	*****	*****		.6
Cobalt	.22			★	.1
Lithium	.100			★	.00
Molybdenum	.58			★	.2
Phosphorus	128		★		10
Selenium	.43		★		.1
Silicon	5		★		0
Vanadium	.28		★		0

ADDITIONAL MINERAL LEVELS

Sulfur	47346	*****	35836
Strontium	5.5	*****	.4
Barium	2.8	*****	.2
Boron	2.8	*****	.5
Gold	.26	*****	.05
Silver	.21	*****	.08
Tin	6	*****	1
Antimony		*****	
Tungsten		*****	
Zirconium	.15	*****	.09

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)		ONE STANDARD DEVIATION ABOVE MEAN		TWO STANDARD DEVIATIONS ABOVE MEAN	
			1	2	3	4
Lead	6	★ ★ ★ ★		1	15	
Arsenic	2.0	★ ★ ★		7.0		
Mercury	1.5	★ ★ ★ ★ ★		2.5		
Cadmium	.7	★ ★ ★ ★ ★ ★		1.0		
Aluminum	5	★ ★		30		
Nickel	.7	★ ★ ★		2.2		
Beryllium	.047	★ ★ ★ ★ ★		1.1		

TOTAL TOXICS

SAMPLE CONDITION: NORMAL

Mineral Rat		
	LEVEL	REFERRING
Ca/Mg	111	5-
Ca/Zn	4.1	2.3-
Ca/P	5.3	2.2-
Ca/Fe	69	22-
Ca/Mn	312	302-
Mg/K	1.7	.7-
Na/K	4.6	1.3-
Zn/K	4	3-
Zn/Cu	15.7	4.0-
Cu/Fe	1.0	.7-
Fe/Mn	4	7-
Cu/Cd	14	31-
Zn/Cd	227	249-
Si/Hg	.27	.14-
Ca/Pb	111	59-
P/Al	23	11-

Louisiana State Police
Bureau of Criminal Identification
Baton Rouge, Louisiana

SID 0840693/PAGE 001

LOUISIANA STATE POLICE

CONFIDENTIAL RECORDS

FOR USE BY AUTHORIZED CRIMINAL JUSTICE AGENCIES ONLY!
(FINGERPRINTS ARE NECESSARY FOR A POSITIVE ID)

CRIMINAL RECORD OF
STATE ID #0840693.

LA. STATE DR LIC

SSN #436-28-4116 #2013994

BIRTH DATE-11-06-28 PLACE-LA

RACE-N HGT-5'09" HAIR-GRA EPH-14 M 1 U 00I 9

SEX -M WGT-155# EYES-BRO M 1 U 00I 10

**

*DATE-11/11/73 NAME -

*LID -114248 AGENCY-SO BATON ROUGE LA

*CHARGE	STATUS	COUNTS	CNV	DISP
S CRIM. DAMAGE TO PROPERTY		1	0	
DISTURBING THE PEACE		1	0	
ILLEGAL DISCHARGE OF FIREARMS		1	0	

**

*DATE-11/05/77 NAME

*LID -9269 AGENCY-SO CLINTON LA

*CHARGE	STATUS	COUNTS	CNV	DISP
DRIVING WHILE INTOXICATED		1	0	

**

*DATE-04/14/79 NAME

*LID -163799 AGENCY-SO BATON ROUGE LA

*CHARGE	STATUS	COUNTS	CNV	DISP
AGGRAVATED ASSAULT		3	0	
(ZACHARY PD)		0	0	

**

*DATE-04/20/79 NAME -

*LID -163959 AGENCY-SO BATON ROUGE LA

*CHARGE	STATUS	COUNTS	CNV	DISP
RECK OPERATION OF A VEH		1	0	
(ZACHARY PD)		0	0	

**

*DATE-04/15/83 NAME

*LID -4773 AGENCY-SO BATON ROUGE LA

*CHARGE	STATUS	COUNTS	CNV	DISP
IMPROPER LANE USAGE		1	0	
NO DRIVERS LICENSE ON PERSON		1	0	

DATE: 9, 26, 83

BAKER CITY COURT
 P O BOX 1
 BAKER LA 70714

ANALYTICO LAB #05-1026
 LAB. WORK # 14533

PATIENT:

AGE: 55

SPECIMEN DATE: 0, 0, 0

DATE RECEIVED: 9, 26, 83

TRACE ELE. (HAIR) ANALYSIS

TEST	RESULT	BODY-CHEM RANGE MALE	DEGREE OF DEFICIENCY (-10 TO -4)	SUGGESTD OPTIMAL (-3 TO +3)	DEGREE OF EXCESS (+4 TO +10)
CA	214	350 - 620	-7 ✓		
MG	20	41 - 87	-7		
ZN	159	162 - 215		-3	
CR	1.06	.54 - .8			+ 7
CU	23	15.46 - 33.1		0	
FE	91	8 - 20			+ 10
MN	4.41	.49 - .8			+ 10 **
K	31	19.52 - 42.86		0	
NA	73	87.53 - 182.59	-4		
LI	.07	.53 - 2.84	-10		
PB	56	0 - 14.5			+ 10
HG	1.18	0 - 1			+ 5
CD	6.57	0 - .88			+ 10 **
AL	180	8 - 17			+ 10 **
CO	.18	.04 - .38		1 1/2	
MO	2.81	.07 - .33			+ 10
SN	6.36	.5 - 1.2			+ 10 **
NI	2.83	.04 - .85			+ 10
AS	4.9	0 - 1.5		1 1/2	
SE	.44	.95 - 4.5	-7		
P	109	100 - 185		-2	

** THESE RESULTS ARE EXTREMELY HIGH, MORE THAN TWICE THE +10 LEVEL.

Louisiana State Police-
Bureau of Criminal Identification
Baton Rouge, Louisiana

SID 0840693/PAGE 002
DRIVING WHILE INTOXICATED
PUBLIC INTIMIDATION
RESISTING AN OFFICER
(BAKER PD)

1	0
2	0
1	0
0	0

END

P.O. Box 111 30
West Chicago, IL 6

W
Lowell B.
1919.

800/323-2784
In Illinois:
312/231-3649

PATIENT:

DOCTOR: TILTON KERR,

LAB NO: 84033-0125 DATE IN: 02/02/84 DATE OUT: 02/07/84

AGE: 24 SEX: M

ACCT:12765

OUT: 02/07/

82701784

DATE SAMPLED: 01/24/84

OFFICE CODE: A-02N

SHAMPOO: ROFFLER

HAI R COLOR: BLACK

SAMPLE SIZE: .400

SAMPLE TYPE: HEAD HAIR

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	LOW			REFERENCE RANGE			HIGH			NUMERICAL VALUE OF REFERENCE RANGE
		BELLOW 2 STD. DEV.	TWO STANDARD DEVIATIONS BELOW	ONE STANDARD DEVIATION (STD) BELOW	ONE STANDARD DEVIATION (STD) ABOVE	ONE STANDARD DEVIATION (STD) ABOVE	ONE STANDARD DEVIATION (STD) ABOVE	ABOVE 2 STD. DEV.			
Calcium	440			★ ★ ★ ★ ★						325- 93	
Magnesium	171			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			32- 12	
Sodium	466			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			27- 15	
Potassium	27			★ ★						11- 8	
Copper	13		★ ★ ★ ★ ★	★ ★ ★ ★ ★						11- 6	
Zinc	174			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			124- 11	
Iron	6			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			5- 1	
Manganese	1.26			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			.27- 1.5	
Chromium	.33	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			.61- 1.3	
Cobalt	.11			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			.12- .3	
Lithium	.051				★					.006- .42	
Molybdenum	1.04				★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			.20- 1.4	
Phosphorus	114			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			108- 17	
Selenium	.99			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			.16- .9	
Silicon	4			★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			4- 1	
Vanadium	.03	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★			.08- .2	

ADDITIONAL MINERAL LEVELS

Sulfur	45395	*****	35836=4687
Strontium	4.7	*****	.4 = 4.
Barium	3.3	*****	.2 = 1.
Boron	3.5	*****	.9 = 3.
Gold	.25	*****	.05 = .3
Silver	.06	*****	.08 = .4
Tin	1	*****	-1-
Antimony			
Tungsten			
Zirconium	.04	*****	.09 = .4

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)		ONE STANDARD DEVIATION ABOVE MEAN		TWO STANDARD DEVIATIONS ABOVE MEAN	
Lead	5	★ ★ ★ ★		115		
Arsenic	2.5	★ ★ ★		7.0		
Mercury	.3	*		2.5		
Cadmium	.5	★ ★ ★ ★		1.0		
Aluminum	1	*		30		
Nickel	1.2	★ ★ ★ ★ ★		2.2		
Beryllium	.045	★ ★ ★		.1		

TOTAL TOXICS

RACE: CAUCASIAN

SAMPLE CONDITION: NORMAL

HAIR PREPARATIONS:

DRINKING WATER SOURCE: C

LEVEL	REFERENCE RANGE
Ca/Mg	2 - 17
Ca/Zn	2.5 - 6.3
Ca/P	2.2 - 6.9
Ca/Fe	63 - 114
Ca/Mn	302 - 2097
Mg/K	6.2 - 9.5
Na/K	17.1 - 5.3
Zn/K	6 - 11
Zn/Cu	13.1 - 10.0
Cu/Fe	1.9 - 4.3
Fe/Mn	5 - 42
Cu/Cd	26 - 163
Zn/Cd	349 - 1023
Se/Hg	3.24 - .633
Ca/Pb	75 - 224

LFD0170240

CLAW/OUTL# 4163265

BAUER

70714

DOD 03/02/59 FRC/M SEM/41 EVERETT HGT/125 HGT/509
RES/0,0,00 EXP 03/02/96

01/21/81 SPEEDING 11/14/89 1971 53245509
03/30/81 SPEEDING 03/11/81 1481 53994699
01/28/83 SPEEDING 10/17/82 1971 62252876
03/08/83 SPEEDING 03/05/83 1951 63041129
03/21/83 SIGNS-SIGS 03/09/83 1971 62273509

P.O. Box 111 30W101 Roosevelt Rd.
West Chicago, IL 60185

800/323-2784
In Illinois:
312/231-3649

DOCTOR: TILTON KERRI

LAB NO: 93356-010 DATE IN: 12/22/83 DATE OUT: 12/28

AGE: 23 SE

ACCT: 1276

DATE SAMPLED: 12/16/83

SHAMPOO:

OFFICE CODE: A-02N

HAIR COLOR: BLACK

SAMPLE SIZE: .380

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	LOW			REFERENCE RANGE			HIGH			NUMERI CAL REFERE CE RANG
		BETWEEN 2 STD DEV	TWO STANDARD DEVIATIONS BELOW	ONE STANDARD DEVIATION BELOW	ONE STANDARD DEVIATION ABOVE	DEVIATION IS TO	ONE STANDARD DEVIATION ABOVE	DEVIATION IS TO	ONE STANDARD DEVIATION ABOVE	DEVIATION IS TO	
Calcium	181	*****	*****	*****	*****	*****	*****	*****	*****	*****	325-
Magnesium	13	*****	*****	*****	*****	*****	*****	*****	*****	*****	32-
Sodium	118	*****	*****	*****	*****	*****	*****	*****	*****	*****	27-
Potassium	56	*****	*****	*****	*****	*****	*****	*****	*****	*****	11-
Copper	12	*****	*****	*****	*****	*****	*****	*****	*****	*****	11-
Zinc	73	*****	*****	*****	*****	*****	*****	*****	*****	*****	124-
Iron	23	*****	*****	*****	*****	*****	*****	*****	*****	*****	5-
Manganese	1.82	*****	*****	*****	*****	*****	*****	*****	*****	*****	.27-
Chromium	.75	*****	*****	*****	*****	*****	*****	*****	*****	*****	.61-
Cobalt	.16	*****	*****	*****	*****	*****	*****	*****	*****	*****	.12-
Lithium	.076	*****	*****	*****	*****	*****	*****	*****	*****	*****	.006-
Molybdenum	1.82	*****	*****	*****	*****	*****	*****	*****	*****	*****	.20-
Phosphorus	140	*****	*****	*****	*****	*****	*****	*****	*****	*****	108-
Selenium	.35	*****	*****	*****	*****	*****	*****	*****	*****	*****	.16-
Silicon	6	*****	*****	*****	*****	*****	*****	*****	*****	*****	4-
Vanadium	.30	*****	*****	*****	*****	*****	*****	*****	*****	*****	.08-

ADDITIONAL MINERAL LEVELS

Sulfur	38391	*****	*****	*****	*****	*****	*****	*****	*****	*****	35836-
Strontium	.4	*****	*****	*****	*****	*****	*****	*****	*****	*****	.4-
Barium	.9	*****	*****	*****	*****	*****	*****	*****	*****	*****	.2-
Boron	5.4	*****	*****	*****	*****	*****	*****	*****	*****	*****	.9-
Gold	.45	*****	*****	*****	*****	*****	*****	*****	*****	*****	.05-
Silver	.17	*****	*****	*****	*****	*****	*****	*****	*****	*****	.08-
Tin	.4	*****	*****	*****	*****	*****	*****	*****	*****	*****	1-
Antimony		*****	*****	*****	*****	*****	*****	*****	*****	*****	
Tungsten		*****	*****	*****	*****	*****	*****	*****	*****	*****	
Zirconium	.19	*****	*****	*****	*****	*****	*****	*****	*****	*****	.09-

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	LOW			REFERENCE RANGE			HIGH			MINERAL RATIO LEVEL REFERENCE
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN	ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN	ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN	
Lead	37	*****	*****	*****	15	*****	*****	*****	*****	*****	Ca/Mg: 1.3 5-
Arsenic	6.5	*****	*****	*****	7.0	*****	*****	*****	*****	*****	Ca/Zn: 2.4 2.3-
Mercury	.7	*****	*****	*****	2.5	*****	*****	*****	*****	*****	Ca/P: 1.2 2.2-
Cadmium	1.6	*****	*****	*****	1.0	*****	*****	*****	*****	*****	Ca/Fe: 7 22-
Aluminum	13	*****	*****	*****	30	*****	*****	*****	*****	*****	Ca/Mn: 9.9 302-
Nickel	2.3	*****	*****	*****	2.2	*****	*****	*****	*****	*****	Mg/K: .2 .7-
Beryllium	.048	*****	*****	*****	.1	*****	*****	*****	*****	*****	Na/K: 2.0 1.3-

TOTAL TOXICS

RACE: UNKNOWN

HAIR PREPARATIONS:

DRINKING WATER SOURCE:

SAMPLE CONDITION: NORMAL

P.O. Box 411 30W101 Rock Bolt Rd
West Chicago, IL 60185 U.S.A.

800/323-2784
In Illinois:
312/231-3649

PATIENT:

DOCTOR: TILTON, KERRI

AGE: 45 SEX:

ACCT: 12765

DATE SAMPLED: 02/16/84

SHAMPOO: IVORY SOAP

SAMPLE SIZE: .400

OFFICE CODE: A-02N

HAIR COLOR: GRAY

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	LOW			REFERENCE RANGE			HIGH			NUMERICAL VALUE OF RANGE
		BELLOW 2STD DEV	TWO STANDARD DEVIATIONS BELOW	ONE STANDARD DEVIATION (STD) BELOW	ONE STANDARD DEVIATION (STD) ABOVE	Two STANDARD DEVIATIONS ABOVE	ABOVE 2STD DEV				
Calcium	124	*****	*****	*****	*****	*****	*****	*****	*****	*****	325-
Magnesium	19	*****	*****	*****	*****	*****	*****	*****	*****	*****	32-
Sodium	148	*****	*****	*****	*****	*****	*****	*****	*****	*****	27-
Potassium	25	*****	*****	*****	*****	*****	*****	*****	*****	*****	11-
Copper	75	*****	*****	*****	*****	*****	*****	*****	*****	*****	11-
Zinc	134	*****	*****	*****	*****	*****	*****	*****	*****	*****	124-
Iron	55	*****	*****	*****	*****	*****	*****	*****	*****	*****	5-
Manganese	.36	*****	*****	*****	*****	*****	*****	*****	*****	*****	.27- 1
Chromium	.18	*****	*****	*****	*****	*****	*****	*****	*****	*****	.61- 1
Cobalt	.33	*****	*****	*****	*****	*****	*****	*****	*****	*****	.12-
Lithium	.013	*****	*****	*****	*****	*****	*****	*****	*****	*****	.006-
Molybdenum	.24	*****	*****	*****	*****	*****	*****	*****	*****	*****	.20- 1
Phosphorus	121	*****	*****	*****	*****	*****	*****	*****	*****	*****	108-
Selenium	.66	*****	*****	*****	*****	*****	*****	*****	*****	*****	.16-
Silicon	7	*****	*****	*****	*****	*****	*****	*****	*****	*****	4-
Vanadium	<.01	*****	*****	*****	*****	*****	*****	*****	*****	*****	.08-

WHAT YOUR HAIR WAS USED FOR MINERAL ANALYSIS:
The mineral levels, when properly interpreted, best represent tissue levels. The hair, nails and teeth are tissues in which trace minerals are sequestered and/or stored.

Measurements of minerals in blood indicate "the amount absorbed and temporarily in circulation after excretion and/or storage".

In addition, the blood has the ability to maintain mineral homeostasis (desired level) at the expense of organs and other systems of the body.

The milk, urine, saliva and sweat measure the "excreted component that is absorbed but excreted". Hair mineral tests then measure a different aspect of the system than blood or urine.

The relative level of stored minerals provides an indication of the minerals that are available to form metabolites or to act as a catalyst (activator) to those enzymes.

Minerals are stored in other body tissues but hair, bone, muscle, heart, etc. requires are expensive & difficult.

Therefore, the consensus of specialists is if human samples are collected, properly cleaned, and stored for analysis correctly, and analyzed by the analytical methods using standards and blanks as tested, in a clean reliable laboratory by experienced personnel, the data are reliable.

ANALYSIS ACCURACY: The degree of accuracy of a hair mineral analysis is dependent upon sampling laboratory procedures, quality control, instrumentation, and data processing.

Doctor's Data Laboratory provides detailed instructions for hair sampling on its request form, laboratory procedures and quality control are second to none, and instrumentation and data processing are "state of the art". Therefore, you obtain very accurate, reproducible results.

LETS DISCUSS MINERALS: This report shows levels found in your hair of nutrient (essential) minerals and toxic minerals. Classification of this type is necessary but possibly misleading since all minerals become toxic at sufficiently high levels and most toxic minerals are essential at extremely low levels. Also, for some minerals, the margin between the level that is beneficial and the level that is harmful may be relatively small. Because minerals interact, the beneficial or harmful levels of one mineral are often determined by the availability of one or more other minerals.

The essential biological minerals are the inorganic counterparts of the essential biological organic nutrients we call vitamins. Unlike vitamins, minerals cannot be synthesized by living organisms. They must be assimilated by the body from what we eat and drink.

A deficiency of a nutrient (essential) mineral might be an element which is necessary for optimal function of the organism. Nutrient minerals are associated with enzymes as an integral part of the molecule (metallo-enzymes) and as activators of the enzyme (metal ion activated enzymes).

TOXIC MINERAL LEVELS: Any mineral may become toxic at a given level. In this report, minerals are defined as toxic when it has been determined that they would not be suppressed at low systemic levels. High toxic metal levels contribute to or cause impaired function of cell metabolism. They may also interfere with the absorption and utilization of other nutrient minerals. Levels at which individual toxic minerals will cause this impaired function vary with individual patients and the margin between the level that is beneficial and the level that is harmful may be relatively small. Because minerals interact, the beneficial or harmful levels of one mineral are often determined by the availability of one or more other minerals.

Other therapy to reduce systemic toxic mineral levels may be a short time solution in contrast to the amount of those minerals detected in the hair because these minerals are being mobilized from the storage areas in the body and "excreted" through the hair follicles. When the stored minerals are depleted, the level detected in the hair will usually drop.

Systemic presence of a greatly elevated toxic material may be confirmed with a pubic hair analysis.

HOW MINERAL LEVELS ARE DETERMINED: Hair mineral analysis at Doctor's Data Laboratory is performed on the very latest in spectroscopic/mass instruments. The Vacuum Induction Coupled Argon Plasma Quantometer (VICAP). Upon receipt the hair sample is washed thoroughly with distilled water, a non-ionic detergent, and an organic solvent to remove topical contaminants. After thorough drying, it is weighed to plus or minus 0.01 gram (.002 oz) and digested in a mixture of nitric and perchloric acids. This clear liquid digest is then brought to a specific volume (plus or minus .03 ml). A controlled portion of this solution is drawn into the VICAP and excited by an electromagnetic field to approximately 10,000°C (18,000°F). The light from this plasma is deflected into a spectrum so that the monochromatic light given off by each mineral can be observed by a photomultiplier tube and converted to an electrical impulse. This impulse is sent to the computer and compared to impulses from standard solutions where the concentration of each mineral is known. The concentration of each mineral found in the sample is then calculated by the computer, converted to parts per million, translated into the report format, and printed.

PRACTITIONER INTERPRETATION NEEDED: Analysis of the hair mineral analysis request is the sole responsibility of a physician who can correlate this test with the patient's other laboratory test results & refer to other diagnostic information and health history.

DEFINITION OF REPORT TERMS

MEAN: This is the statistical logarithmic average of highly selected healthy population.

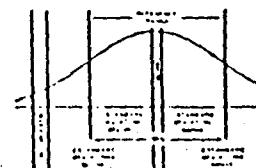
REFERENCE RANGE: Range includes the deviation above and below the mean of this population.

The Reference Range for the entire population tested by DCI is within the range of -1 to +1 on the computer.

One Standard Deviation above and below the mean encompasses approximately 68% of this selected population.

Two Standard Deviations both above and below the mean encompasses approximately 95% of their healthy population.

More Than Two Standard Deviations indicate a state of being in which is found abnormal or less of this selected healthy population.



Population represents a highly selected group of people who are the same sex and in the same age group.

NUTRIENT MINERAL LEVELS: For the purpose of report Nutrient Minerals are defined as those that support metabolic activity and which need supplementation if a systemic deficiency has been established. Low hair mineral levels do not necessarily establish a systemic deficiency nor do high hair mineral levels establish a systemic excess. Do not be fooled! Hair levels of nutrient minerals decrease with increasing age and that continued proliferation will usually cause hair levels (the term "low" levels).

INTERPRETATION: If the elements under test minerals are predominantly to the left (Ca, Mg, etc.) to the far right, indicate the current nutritional status should be considered. While there are many causes of malabsorption, some of the more common intestinal, stomach acid, insufficient digestive enzymes, increased balance of bowel bacteria, fiber diets or anything else that would include the bowel, bulging abdominal muscles, bloating, diarrhea. See your physician for more information.

CAUTION: A high level of a nutrient or toxic mineral does not necessarily mean an excess of the mineral in the system. It could indicate a deficiency or be a result of environmental contamination. Consult the other side of the report and your physician.

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	HIGH		
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN
Lead	3	**	15	
Arsenic	1.8	***	7.0	
Mercury	1.5	****	2.5	
Cadmium	.3	***	1.0	
Aluminum	2	*	30	
Nickel	2.1	*****	2.2	
Thallium	.135	*****	.1	

RACE: CAUCASIAN

SAMPLE CONDITION: NORMAL

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

Procedures According to ASE/T Protocol
Oral Work Performed By Doctor's Data Laboratories Inc.

P.31

MOORE CLEAN PRINT® Moore Business Forms, Inc. PATENTED

P.O. Box 111 30W101 Roosevelt Rd.
West Chicago, IL 60185 U.S.A.

800/323-2784
In Illinois:
312/231-3649

DATE SAMPLED: 02/16/84
OFFICE CODE: A-02N

DOCTOR: TILIUM KERRI

LAB NO: 84054-0089

DATE IN: 02/23/84

AGE: 28 SEX:

ACCT: 12765

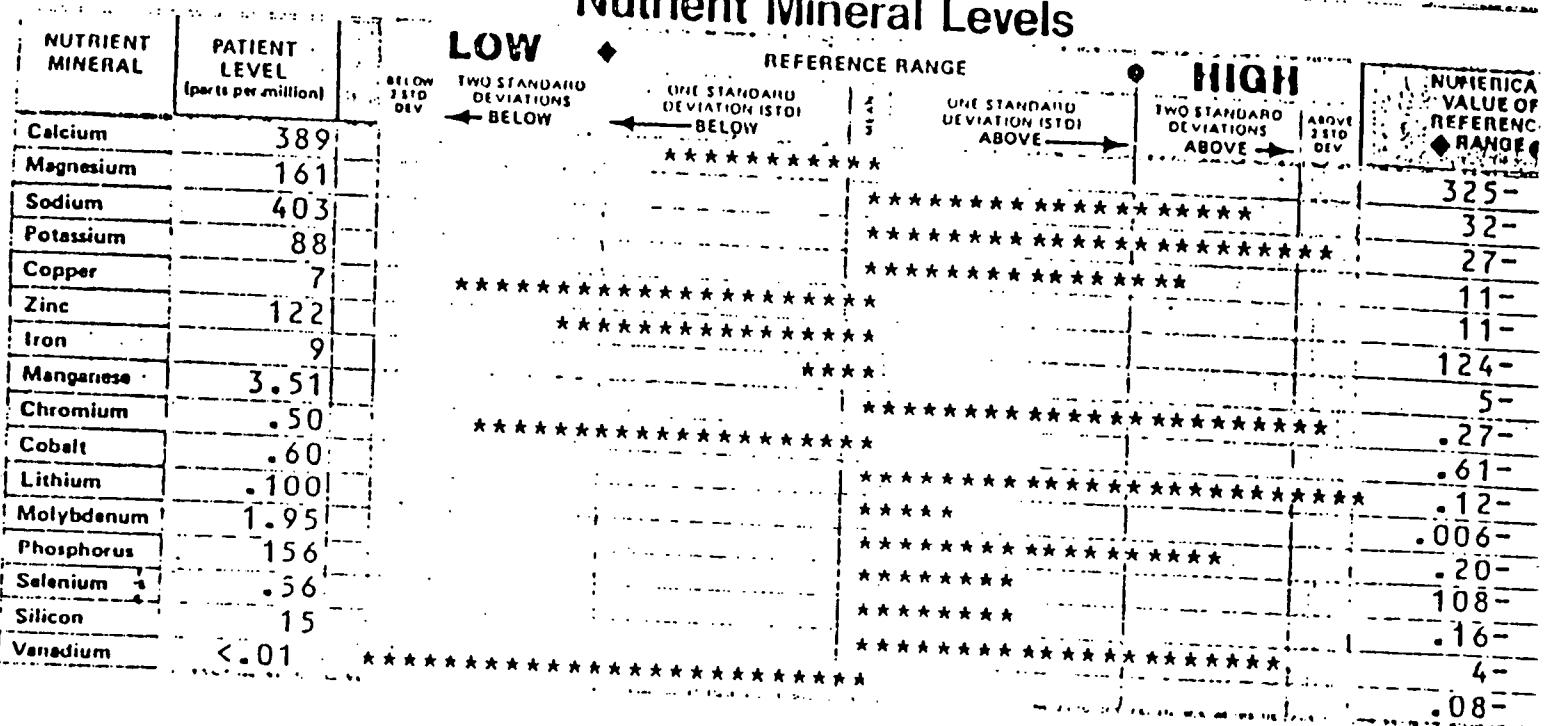
DATE OUT: 02/24/84

SAMPLE SIZE: .200

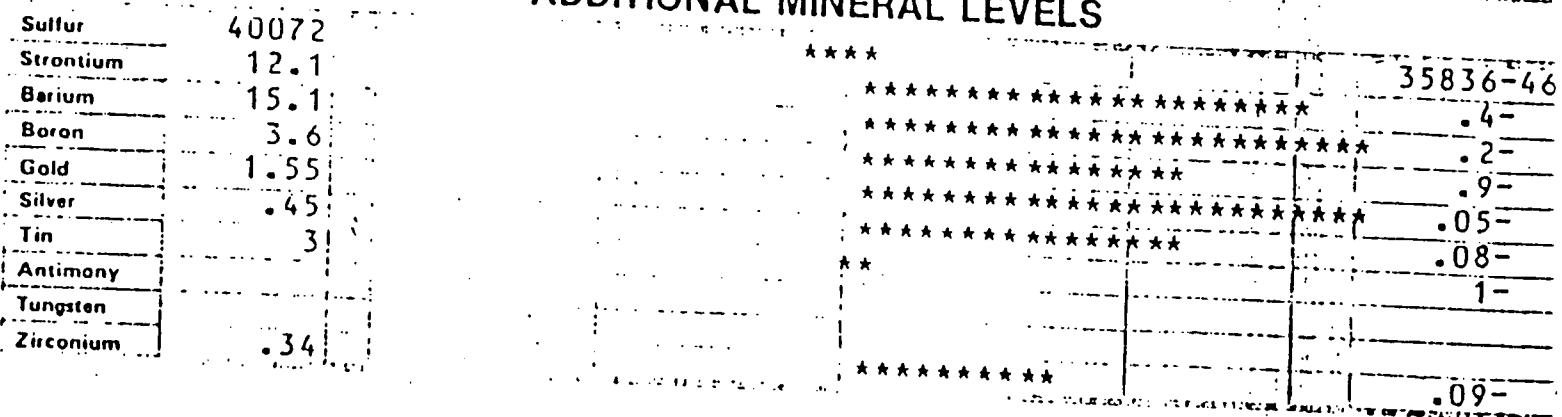
SAMPLE TYPE: HEAD HAIR

SHAMPOO: IVORY SOAP
HAIR COLOR: BLACK

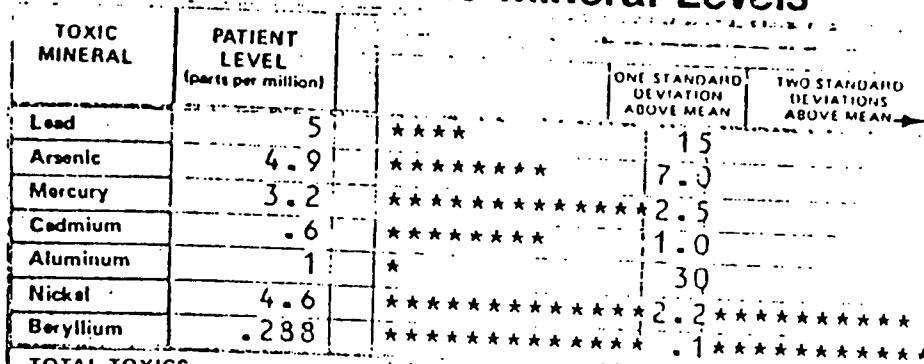
Nutrient Mineral Levels



ADDITIONAL MINERAL LEVELS



Toxic Mineral Levels



TOTAL TOXICS

RACE: BLACK

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

SAMPLE CONDITION: NORMAL

	LEVEL	REFERENCE RANGE
Ca/Mg	2	5-
Ca/Zn	3.1	2.3- 6.
Ca/P	2.4	2.2- 6.
Ca/Fo	4.2	22- 11
Ca/Mn	110	302- 205
Mg/K	1.8	.7- 9.
Na/K	4.5	1.3- 5.
Zn/K	1	3- 1
Zn/Cu	16.8	4.0- 10.
Cu/Fo	.8	.7- 4.
Fe/Mn	2	7- 4
Cu/Cd	11	31- 16
Zn/Cd	189	249- 102
Se/Hg	.17	.14- .6
Ca/Pb	75	59- 22
P/Al	107	44- 22

Pen in Places
and
in
the
air

P.O. Box 111 30W101 Roosevelt
West Chicago, IL 60185 U.S.A.

800-323-2784
Illinois:
0-323-3649

PATIENT:

DOCTOR: TILTON KERRI

AGE: 23 SEX:

ACCT: 12765

LAB NO: 84061-0075 DATE IN: 03/01/84 DATE OUT: 03/01/84

DATE SAMPLED: 02/13/84

SHAMPOO:

OFFICE CODE: A-02H

HAIR COLOR: BROWN

SAMPLE SIZE: .360

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)	LOW		REFERENCE RANGE		HIGH		NUMERICAL VALUE OF REFERENCE RANGE
		BELLOW 2STD DEV	TWO STANDARD DEVIATIONS BELOW	ONE STANDARD DEVIATION (STD) BELOW	ONE STANDARD DEVIATION (STD) ABOVE	TWO STANDARD DEVIATIONS ABOVE	ABOVE 2STD DEV.	
Calcium	664			★ ★ ★ ★ ★ ★ ★ ★				393-1
Magnesium	36			★ ★ ★ ★ ★ ★ ★ ★				39-
Sodium	385			★ ★ ★ ★ ★ ★ ★ ★				19-
Potassium	139			★ ★ ★ ★ ★ ★ ★ ★				9-
Copper	39			★ ★ ★ ★ ★ ★ ★ ★				13-
Zinc	127			★ ★ ★ ★ ★ ★ ★ ★				128-
Iron	11			★ ★ ★				6-
Manganese	2.70			★ ★ ★ ★ ★ ★ ★ ★				.30-1
Chromium	.90			★				.61-1
Cobalt	.42			★ ★ ★ ★ ★ ★ ★ ★				.12-
Lithium	.102			★ ★ ★				.006-
Molybdenum	1.25			★ ★ ★ ★ ★ ★ ★ ★				.19-1
Phosphorus	112			★ ★ ★ ★ ★				.94-
Selenium	.33			★ ★				.16-
Silicon	5			★ ★ ★ ★				4-
Vanadium	.28			★ ★ ★ ★				.09-

WHAT YOUR HAIR WAS USED FOR MINERAL ANALYSIS:
Your mineral levels, when properly interpreted, best represent tissue levels. The hair, nails and teeth are tissues in which trace minerals are sequestered and/or stored.

Measurements of minerals in blood indicate the amount which are absorbed and temporarily in circulation before excretion and storage.

In addition, the blood has the ability to maintain mineral homeostasis at certain levels at the expense of organs and other systems of the body.

The more urine, saliva and sweat measure the mineral component that is absorbed but excreted.

These mineral tests, then, measure a different aspect of the system than blood or urine.

The relative level of stored minerals provides an indication of the minerals that are available to form skeletons, teeth or act as a catalyst (activated) to various enzymes.

Minerals are stored in other body tissues but have been more often heard of. Biopsies are expensive and difficult.

Therefore, the consensus of specialists is, if human hair samples are collected properly, cleaned and prepared for analysis correctly and analyzed by the best analytical methods using standards and blanks as required, in a clean reliable laboratory by experienced personnel, the data are reliable.

U.S. Environmental Protection Agency - 600-320-089
U.S. Environmental Protection Agency - 600-320-049

ANALYSIS ACCURACY: The degree of accuracy of a hair mineral analysis is dependent upon sampling, laboratory procedures, quality control instrumentation, and data processing.

Doctor's Data Laboratories provides detailed instructions for hair sampling on its request form. Laboratory procedures and quality control are second to none, and instrumentation and data processing are state-of-the-art. Therefore, you obtain very accurate, reproducible results.

LET'S DISCUSS MINERALS: This report shows levels found in your hair of nutrient (essential) minerals and toxic minerals. Classification of this type is necessary but possibly misleading since all minerals become toxic at sufficiently high levels, and most toxic minerals are essential at extremely low levels. Also, for some minerals the margin between the level that is beneficial and the level that is harmful may be relatively small. Because minerals interact, the beneficial or harmful levels of one mineral are often determined by the availability of one or more other minerals.

The essential biological minerals are the inorganic counterparts of the essential biological organic nutrients we call vitamins. Unlike vitamins, minerals cannot be synthesized by living organisms; they must be assimilated by the body from what we eat and drink.

A definition of a nutrient (essential) mineral is one element which is necessary for optimal function of the organism. Nutrient minerals are associated with enzymes as an integral part of the molecule in relation to energy and as activators of the enzyme (activation activated enzymes).

TOXIC MINERAL LEVELS: Any mineral may become toxic at a given level. In this report, minerals are defined as TOXIC when it has been determined that they would not be suitable for at least systemic health. High level metals contribute to or cause increased function of cell metabolism. They may also interfere with the absorption and utilization of native or mineral levels at which individual toxic minerals will cause the impaired function along with individual pathologies and may depend upon the general nutritional state, age and genetic factors.

Low systemic levels of nutrient minerals contribute to the absorption and metabolic interference of toxic minerals. High systemic levels of nutrient minerals offer protection against toxic minerals and minimize their toxic effects.

Proper therapy to reduce systemic toxic mineral levels may for a short time, result in an increase in the amount of these minerals detected in the hair because these minerals are being excreted from their storage areas in the body and excreted through the hair.

Deficiency: When the stored minerals are depleted, the hair detects the hair will tell the story.

Systemic presence of a greatly elevated toxic mineral may be confirmed with a public hair analysis.

HOW MINERAL LEVELS ARE DETERMINED: Hair mineral analysis at Doctor's Data Laboratories is performed on the very latest in spectrophotometric instruments, the Vacuum Induction Coupled Argon Plasma Quantimeter (VICAP). Upon receipt, the hair sample is washed thoroughly with deionized water, a nonionic detergent, and an organic solvent to remove topical contaminants. After thorough drying, it is weighed to plus or minus 0.01 gram (0.005 g) and digested in a mixture of nitric and perchloric acids. This clean liquid digest is then brought to a specific volume (plus or minus 0.5 ml). A controllable portion of this solution is drawn into the VICAP and excited by an electromagnetic field to approximately 10,000°C (18,000°F). The light from this plasma is collected into a spectrum so that the monochromatic light given off by each mineral can be observed by a photomultiplier tube and converted to an electrical impulse. This impulse is sent to the computer and compared to impulses from standard solutions where the concentration of each mineral is known. The concentration of each mineral found in the sample is then calculated by the computer, converted to parts per million, translated to the report format, and printed.

PHYSICIAN INTERPRETATION NEEDED: A portion of this hair mineral analysis report is for the physician who can correlate this with the patient's other laboratory test results, symptomatology, biochemical, environmental & health history.

DEFINITION OF REPORT TERMS

MEAN: This is the statistical logarithm in our highly selected healthy population.

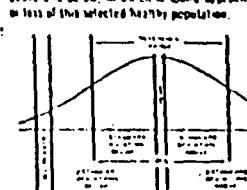
REFERENCE RANGE: The range includes or contains above and below the mean of the population.

The Reference Range for the value given by Doctor's Data is within the dashes (---) in the computer.

One Standard Deviation above and below represents approximately 68% of the selected population.

Two Standard Deviations both above and below encompasses approximately 95% of the healthy population.

More than Two Standard Deviations indicate above and below, in which is found approximately less of the selected healthy population.



Population represents a highly selected group of people who are the same sex and in the same age group.

NUTRIENT MINERAL LEVELS: For the purpose of this report Nutrient Minerals are defined as those to proper metabolic activity and which supplemented if a systemic deficiency has followed. Low hair mineral levels do not establish a systemic deficiency nor do high levels establish a systemic excess. Do not be hair levels of nutrient minerals decrease supplementation. Physicians report that when there is most often temporary and that supplementation will usually raise hair levels four to five fold.

MALABSORPTION: If the digestive enzymes are predominantly to the left (to the left of the mean), indicate the panel, a diet should be considered. While there are no malabsorption, some of the more common insufficient stomach acid, insufficient enzymes, improper balance of bowel bacteria, fiber diets or anything else that would interfere, buying glutathione, aurasol, bleaching etc. See your physician for more information.

CAUTION: A high level of a nutrient or mineral does not necessarily mean an excess of the mineral in the system. It could indicate deficiency or be a result of environmental contamination. Consult the other side of this report and your physician.

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	HIGH		
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN
Lead	16	★ ★ ★ ★ ★ ★ ★ ★	19	
Arsenic	3.6	★ ★ ★ ★	7.0	
Mercury	1.8	★ ★ ★ ★ ★ ★	2.5	
Cadmium	4.5	★ ★ ★ ★ ★ ★ ★ ★	1.0	★ ★ ★ ★ ★ ★ ★ ★
Aluminum	6	★ ★	30	
Nickel	2.9	★ ★ ★ ★ ★ ★ ★ ★	2.2	
Beryllium	.058	★ ★ ★ ★	.1	

RACE: CAUCASIAN SAMPLE CONDITION: NORMAL

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

Lab Procedures According to ASEIL Protocol

Louisiana State Police
Bureau of Criminal Identification
Baton Rouge, Louisiana

SID 4032944/PAGE 004

LOUISIANA STATE POLICE

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(FINGERPRINTS ARE NECESSARY FOR A POSITIVE ID)

CRIMINAL RECORD OF
STATE ID #4032944

SSN #439-23-9679

BIRTH DATE-09-17-60 PLACE-IN

RACE-W HGT-5'02" HAIR-BRO EPH-6 S 25 W 110 16

SEX -F WGT-145lb EYES-HAZ S 20 W 001 16

*DATE-07/06/79 NAME -

*LID -70693 AGENCY-PD BATON ROUGE LA

*CHARGE	STATUS	COUNTS	DISP
FELONY THEFT		1	DECLINED TO PROSEC.
CONTRI DELINQUENCY JUVENILE		1	11-24-79

*DATE-12/05/83 NAME -			
*LID -007302 AGENCY-SU BATON ROUGE LA		0	
*CHARGE	STATUS	COUNTS	DISP
SHOPLIFTING		1	
FUG WARR:BAKER CITY		1	
CRT:BAKER P.D.		0	

END

LADPS0000 37478
5136 10:39 04NOV83
0125 10:39 04NOV83
LA0170100
0000000000

SIG/A OLN/ 3325989

3646 IRUMAN ST

ZACHARY 70791
DOB 10/22/61 RAC/N SEX/M EYE/BRN WGT/140 HGT/507
RES/0,0,00 EXP 10/22/87

7/30/83 EBR
7/30/83 COMPL SEC BOTH PEN. PROP 06078941 00000000
7/01/82 SPEEDING PEN 00078941 00078941
7/05/83 SIGNS-SIGS 07/25/82 1051 60434586
06/24/83 1071 64341739

P.O. BOX 1144 30W101 Roosevelt Rd.
West Chicago, IL 60185 U.S. 312/231-3649

DOCTOR: TILTON KERRI

ACCT: 321ST

LAB NO: 84054-009 DATE IN: 02/23/84

ACCT: 127

DATE SAMPLED: 02/17/84

OFFICE CODE: A-02N

SHAMPOO: STYLE II

HAIR COLOR: BLACK

DATE OUT: 02/22

SAMPLE SIZE: 400

SAMPLE TYPE: HEAD HAIR

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)
Calcium	877
Magnesium	62
Sodium	396
Potassium	24
Copper	26
Zinc	137
Iron	8
Manganese	2.03
Chromium	.95
Cobalt	.59
Lithium	.025
Molybdenum	.83
Phosphorus	.99
Selenium	.18
Silicon	5
Vanadium	<.01

LOW

BELLOW
2 STD DEV

TWO STANDARD DEVIATIONS BELOW

REFERENCE RANGE

ONE STANDARD DEVIATION (STD) BELOW

ONE STANDARD DEVIATION (STD) ABOVE

HIGH

ABOVE
2 STD DEV

NUMBER OF VALUES REFERRED TO RATIO

325

32

27

11

124

5

.27

.61

.006

.20

108

.16

4

.08

ADDITIONAL MINERAL LEVELS

Sulfur	41574
Strontium	7.2
Barium	14.5
Boron	1.3
Gold	.62
Silver	.21
Tin	5
Antimony	
Tungsten	
Zirconium	.28

35836-

.4-

.2-

.9-

.05-

.08-

1-

.09-

31-

31-

31-

31-

31-

31-

31-

31-

31-

31-

31-

31-

31-

31-

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)
Lead	8
Mercury	2.1
Aluminum	1.4
Chromium	.5
Thallium	1
Uranium	2.3
Fluoride	.136

ONE STANDARD DEVIATION ABOVE MEAN

TWO STANDARD DEVIATIONS ABOVE MEAN

MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN

Mineral Ratio

	LEVEL	REFERENCE
Ca/Mg	14	5-
Ca/Zn	6.3	2.3-
Ca/P	8.8	2.2-
Ca/Fe	104	22-
Ca/Mn	430	302-
Mg/K	2.5	.7-
Na/K	16.1	1.3-
Zn/K	5	3-
Zn/Cu	5.2	4.0-
Cu/Fe	3.0	.7-
Fe/Mn	4	7-
Cu/Cd	43	31-
Zn/Cd	231	249-
Se/Hg	.12	.14-
Ca/Pb	102	59-
P/Al	78	11-

RACE: CAUCASIAN

SAMPLE CONDITION: NORMAL

ABRATIONS:

WATER SOURCE: CITY WATER

According to ASELT Protocol

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John J. Evers, Director

Louisiana State Police
 Bureau of Criminal Identification
 Baton Rouge, Louisiana

SID 1201071/PAGE 001

LOUISIANA STATE POLICE

CONFIDENTIAL RECORDS

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 (FINGERPRINTS ARE NECESSARY FOR A POSITIVE ID)

CRIMINAL RECORD OF
 STATE ID #1201071

SSN #442-92-8994

BIRTH DATE-09-24-54 PLACE-TN

RACE-W HGT-5'06" HAIR-BRO EPH-16 M 1 U III 14
 SEX -M WGT-140# EYES-BLU M 9 U III 16

**

*DATE-09/24/83 NAME

*LID -6525 AGENCY-SO BATON ROUGE LA

*CHARGE	STATUS	COUNTS	DISP
DRIVING WHILE INTOXICATED		1	
FAILURE TO MAINT. CONTROL		1	
LA DRIV. LIC REQ.		1	
(BAKER PD)		0	

**

*DATE-11/21/83 NAME

*LID -1083907 AGENCY-DUC BATON ROUGE LA

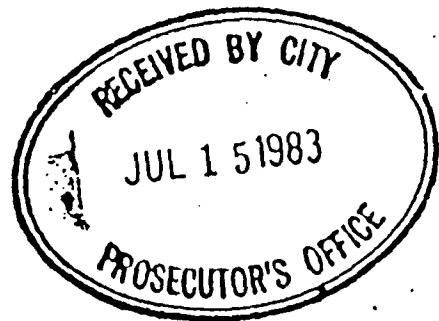
*CHARGE	STATUS	COUNTS	DISP
DUI		1	100 DAYS JAIL, SUSP 1 YR SUPV PROB, PROB BEG 11-21-83 ENDS 11-21-84

END

Sub. full trial program

P 42

SEARCH#	ACCDTY-EP B.R. TRCK A LA	STATUS	COUNTS	CRV	DISP
DRIVING WHILE INTOXICATED			1	0	
CRD#1			0	0	
DRIVING UNDER SUSPENSION			1	0	
(1) ACCIDENT)			0	0	
DATE-06/12/96 VAR# -					
SEARCH#-1180267 ACCDTY-PD BATT#-00132 JP					
SEARCH#	ACCDTY-EP B.R. TRCK A LA	STATUS	COUNTS	CRV	DISP
DRIVING UNDER SUSPENSION			1	0	
FAIL TO YIELD			1	0	
AT 1800 HRS			0	0	
DATE-06/14/96 VAR# -					
SEARCH#-1180269 ACCDTY-PD BATT#-00132 JP					
SEARCH#	ACCDTY-EP B.R. TRCK A LA	STATUS	COUNTS	CRV	DISP
DRIVING WHILE INTOXICATED			1	4 S 10 PP SUSP 2 YR	
				ACT SUPV PROB TO	
				BEG 5-14-82	
				END 5-14-84	



CLS/C-CLN/ 2264562

REF ID: A6146
202-401955 70300
EXC/NSE/H EYE/BRN 457/445 507/604

P.O. Box 111 30W101 Roosevelt
West Chicago, IL 60185 U.S.A.
DATE SAMPLED: 04/25/84 OFFICE CODE: A-12N

800/323-2784
In Illinois:
312/231-3649

PATIENT:
DOCTOR: TILTON KERRI
LAB NO: 84121-0179
SHAMPOO: PRELL
HAIR COLOR: BLACK

AGE: 49 SEX:
ACCT: 127.65
DATE IN: 04/30/84 DATE OUT: 05/01/84
SAMPLE SIZE: .400
SAMPLE TYPE: HEAD HAIR

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)
Calcium	305
Magnesium	35
Sodium	68
Potassium	23
Copper	10
Zinc	146
Iron	14
Manganese	4.54
Chromium	.64
Cobalt	.28
Lithium	.033
Molybdenum	1.36
Phosphorus	111
Selenium	.33
Silicon	6
Vanadium	.12

LOW

TWO STANDARD DEVIATIONS BELOW

ONE STANDARD DEVIATION (STD) BELOW

REFERENCE RANGE

ONE STANDARD DEVIATION (STD) ABOVE

HIGH

TWO STANDARD DEVIATIONS ABOVE

NUMERICAL VALUE OF DIFFERENCE FROM REFERENCE RANGE

325-

32-

27-

11-

11-

124-

5-

27-1.

61-1

12-

.006-.4

.20-1.

108-1

.16-

.08-

ADDITIONAL MINERAL LEVELS

Sulfur	37295
Strontium	1.5
Barium	1.3
Boron	3.1
Gold	.33
Silver	.15
Tin	< 1
Antimony	
Tungsten	
Zirconium	.12

35836-468

.4-4.

.2-.1.

.9-.3.

.05-

.08-

1-

.09-.4

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)
Lead	23
Arsenic	1.6
Mercury	1.7
Cadmium	3.0
Aluminum	8
Nickel	2.4
Beryllium	.025

ONE STANDARD DEVIATION ABOVE MEAN

TWO STANDARD DEVIATIONS ABOVE MEAN

MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN

HIGH

Mineral Ratios

	LEVEL	REFERENCE RANGE
Ca/Mg	8	5-17
Ca/Zn	2.0	2.3-6.6
Ca/P	2.7	2.2-6.9
Ca/F	20	22-114
Ca/Mn	67	302-2097
Na/K	1.5	.7-9.5
Na/K	2.9	1.3-5.3
Zn/K	6	3-11
Zn/Cu	14.4	4.0-10.0
Cu/Fe	.6	.7-4.3
Fe/Mn	3	7-42
Cu/Cd	3	31-163
Zn/Cd	48	249-1023
Se/Hg	.19	.14-.63
Ca/Fb	13	59-224

TOTAL TOXICS

SAMPLE CONDITION: NORMAL

RACE: BLACK

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

b Procedures According to ASEIL Protocol
Laboratory Work Performed By Hodler's Data Laboratories Inc.



DIVISION OF STATE POLICE

BUREAU OF IDENTIFICATION

BATON ROUGE



Louisiana State Police
Bureau of Criminal Identification
Baton Rouge, Louisiana

NOTICE

DISSEMINATION OF INFORMATION OBTAINED FROM

The following is the record of State Police No. 1444700.

SIXTY STATE POLICE CRIMINAL IDENTIFICATION FILES

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CONTRIBUTOR OR FINGERPRINTS UNION (NAME AND NUMBER) |

POSSIBILITY FOR ANY UNAUTHORIZED DISSEMINATION |

ARRESTED OR RECEIVED |

CHARGE |

DISPOSITION |

D Baton Rouge, La.		11-7-55	Reckless Driving	
O Baton Rouge, La.		11-23-61	DWI & Hit & Run	
D, Baton Rouge, La.		11-6-65	Simple drunk	\$25 or 10 (\$2.50 susp)
D Baton Rouge, La.		12-12-65	Simp. Drk.	\$15 or 10 (\$2.50 C paid)
SO		5-5-74	DWI	
Baton Rouge, La.				
PD		2-15-75	S/Drk	2-27-75 10 d susp 1 yr ur prob +\$5 CC
D	Baton Rouge La	12-6-75	Dist. peace Public intoxica.	

Since neither fingerprints nor identifying number which is indexed in our files accompanied your request, Louisiana Bureau of Identification cannot guarantee in any manner that this material concerns the individual in whom you are interested.

P.O. Box 111 30W101 Roosevelt Rd.
West Chicago, IL 60185 U.S.A.

800/323-2784
In Illinois:
312/231-3649

DOCTOR: TILTON, KERRI
LAB NO: 34076-000-DATE:

AGE: 45 S

ACCT: 127

DATE SAMPLED: 93 /

OFFICE CODE: A-02N

SHAMPOO: INTERMACK RINGS

SHERRIACK R
HAIR COLOR: #1 ASK

03/15/84

DAT

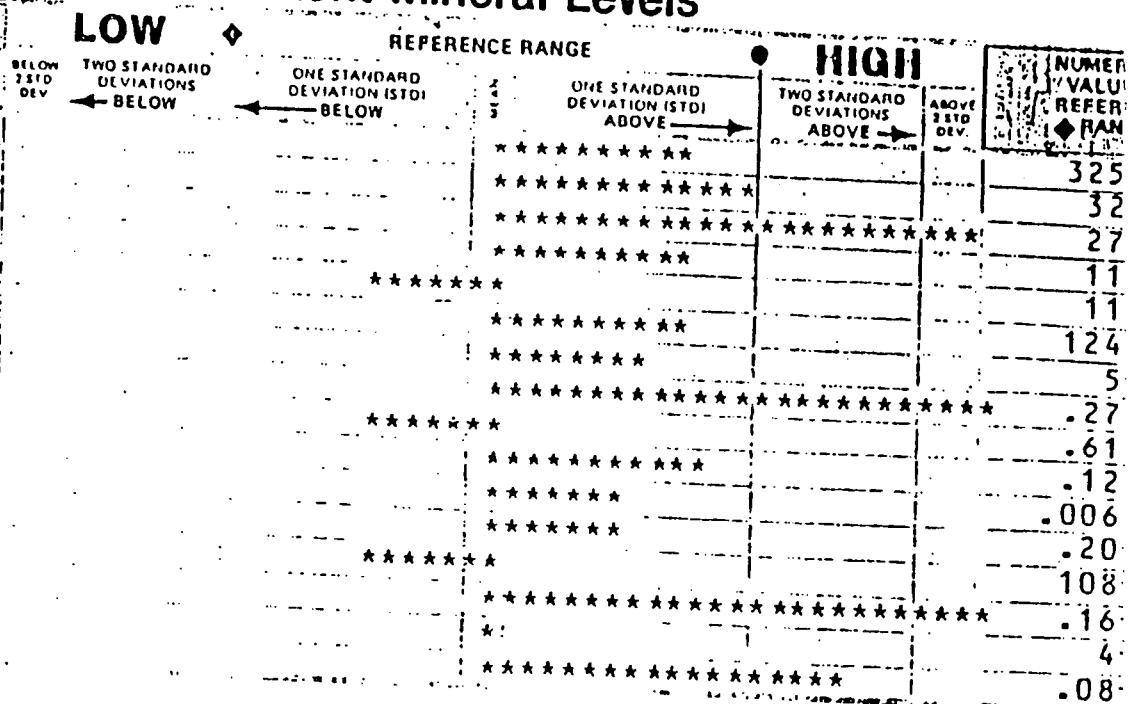
400

SAMPLE SIZE: 400

SAMPLE TYPE: HEAD HAIR

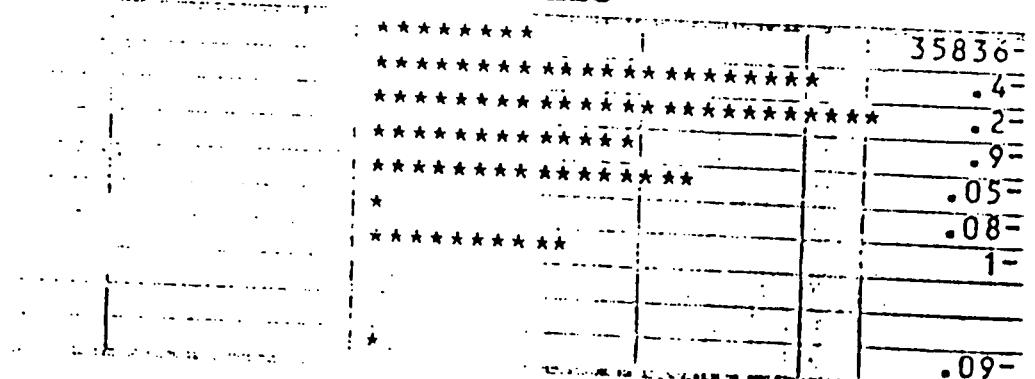
Nutrient Mineral Levels

NUTRIENT MINERAL	PATIENT LEVEL (parts per million)
Calcium	700
Magnesium	105
Sodium	474
Potassium	52
Copper	17
Zinc	171
Iron	13
Manganese	3.08
Chromium	.72
Cobalt	.27
Lithium	.121
Molybdenum	.32
Phosphorus	125
Selenium	4.75
Silicon	0
Vanadium	.29



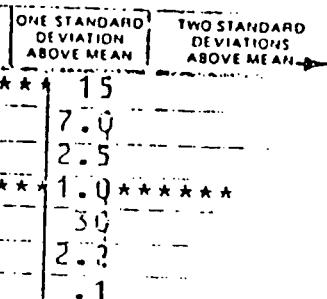
ADDITIONAL MINERAL LEVELS

Sulfur	43350
Strontium	10.3
Barium	6.3
Boron	3.0
Gold	.45
Silver	.19
Tin	7
Antimony	
Tungsten	
Zirconium	.21



Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)
Lead	16
Arsenic	2.6
Mercury	1.6
Cadmium	1.8
Aluminum	6
Nickel	1.3
Beryllium	.039



TOTAL TOXICS

RACE: CAUCASIAN

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

SAMPLE CONDITION: NORMAL

Mineral Ratio		
	LEVEL	REFERENCE
Ce/Mg	7	5-
Ce/Zn	4.4	2.3-
Ce/Pi	6.0	2.2-
Ce/Fe	56	22-
Ce/Mn	94	302- 2
Mg/K	2.0	.7-
Na/K	9.0	1.3-
Zn/K	3	3-
Zn/Cu	9.8	4.0- 1
Cu/Fe	1.3	.7-
Fe/Mn	1	.7-
Cu/Cd	9	31-
Zn/Cd	91	249- 1
Se/Hg	2.94	.14-
Ca/Pb	46	59-
P/Al	18	12-

LADPS0000 46107
5692 11:38 28JAN84
0101 11:38 28JAN84
LA0170100
0000000000

CLS/A DLN/ 2158202

RT 2 BOX 49 REAMS RD
ZACHARY 70791
DOB 11/05/38 RAC/W SEX/M EYE/GRN WGT/160 HGT/510
RES/0,0,00 EXP 11/05/83

05/22/81 INSURANCE FIL PP000000 55054744
02/20/82 EBR DRIV OTH PROP EE019558 00000000
05/22/81 DWI 09/25/80 1071 55054744 060-DAYS SUS REI
08/31/81 PICKUP ISS 09/08/81 2002 55054744 001-DAYS
09/08/81 DATE GIVEN 11/08/81 4000 55054744
04/23/82 OTHER MOV. 02/20/82 2071 58425576
08/18/82 PICKUP ISS 09/07/82 2002 55054744 001-DAYS
09/07/82 DATE GIVEN 03/04/83 4000 55054744

Louisiana State Police
 Bureau of Criminal Identification
 Baton Rouge, Louisiana

SID 106857S/PAGE 001

LOUISIANA STATE POLICE

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CRIMINAL RECORD OF

STATE ID #106857S

LA. STATE DR LIC

FBI #143075W7 SSN #438-27-0322 #5124714

BIRTH DATE-07-13-59 PLACE-MS

RACE-W HGT-5'03" HAIR-BRO FPH-22 L 25 W 100 --

SEX -F WGT-140# EYES-BRO 11 16 W MOI 17

**

*DATE-06/26/80 NAME --

*LID -175293 AGENCY-SU BATON ROUGE

CHARGE	STATUS	COUNTS	CNV	DISP
WARR 6853 PROB VIOL		1	0	
WARR 739 & 7392		2	0	
(2 CTS ISS W/LESS		0	0	
CHECKS)(BAKER PD)		0	0	

END

This more

P.O. Box 111 30W101 Roosevelt
West Chicago, IL 60185 U.S.A.

800/323-2784
In Illinois:
312/231-3649

DOCTOR: TILTON KERRI

LAB NO: 84033-0127 DATE IN: 02/02/84 DATE OUT: 02/07/84

DATE SAMPLED: 01/23/84

OFFICE CODE: A-02N

SHAMPOO: AGREE

HAIR COLOR: BROWN

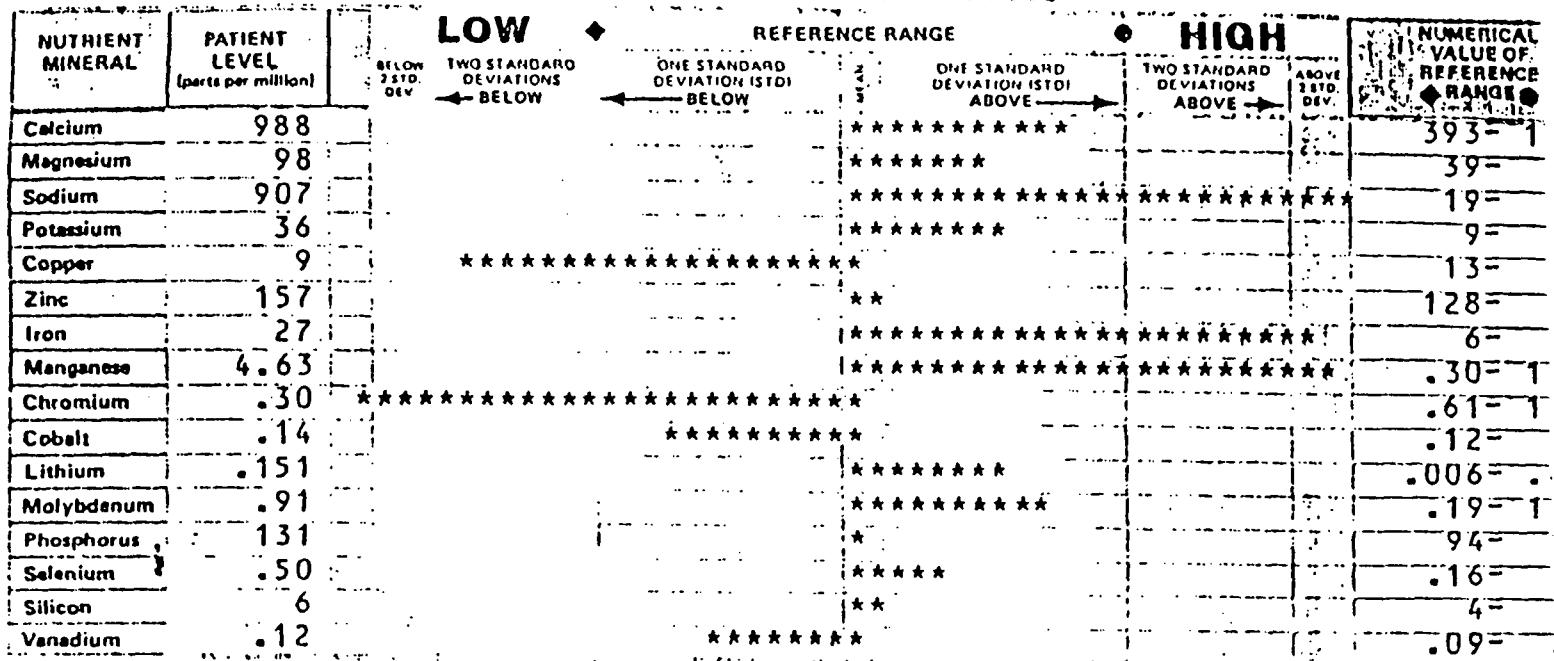
AGE: 24 SEX:

ACCT: 12765

SAMPLE SIZE: .400

SAMPLE TYPE: HEAD HAIR

Nutrient Mineral Levels



ADDITIONAL MINERAL LEVELS

Sulfur	46450	★ ★ ★ ★	32760-511
Strontium	9.6	★ ★ ★	.7 - 10
Barium	9.9	★ ★ ★	.5 -
Boron	2.7	★ ★	.9 -
Gold	.23	★ ★	.06 -
Silver	.11	★ ★	.10 -
Tin	6	★	2 -
Antimony			
Tungsten			
Zirconium	.55	★ ★ ★	.12 -

Toxic Mineral Levels

TOXIC MINERAL	PATIENT LEVEL (parts per million)	REFERENCE RANGE		
		ONE STANDARD DEVIATION ABOVE MEAN	TWO STANDARD DEVIATIONS ABOVE MEAN	MORE THAN TWO STANDARD DEVIATIONS ABOVE MEAN
Lead	8	★ ★ ★	15	
Arsenic	.5	*	7.0	
Mercury	.2	*	2.5	
Cadmium	.6	★ ★ ★	1.0	
Aluminum	5	**	30	
Nickel	.9	★ ★	2.2	
Beryllium	.038	★ ★	1.1	

TOTAL TOXICS

RACE: CAUCASIAN

HAIR PREPARATIONS:

DRINKING WATER SOURCE: CITY WATER

SAMPLE CONDITION: NORMAL

Mineral Ratios

LEVEL	REFERENCE RANGE
Ca/Mg	6 - 1
Ca/Zn	2.5 - 7
Ca/Pt	2.7 - 9
Ca/Fc	33 - 14
Ca/Mn	470 - 244
Mg/K	.9 - 10
Na/K	1.4 - 5
Zn/K	3 - 1
Zn/Cu	4.1 - 10
Cu/Fe	.9 - 5
Fe/Mn	6 - 3
Cu/Cd	37 - 20
Zn/Cd	289 - 127
Se/Hg	.13 - .5
Ca/Eb	78 - 34
P/Au	10 - 15

Bureau of State Police
Baton Rouge, Louisiana

SID 1078578/PAGE 002
(P.D. BAKER)

*DATE-07/30/82 NAME

*LID -78602

*CHARGE AGENCY-PD BATON ROUGE LA

STATUS COUNTS CNV DISP

DRIVING WHILE INTOXICATED

1 0

FAILURE TO MAINT. CONTROL

1 0

DRIVING UNDER SUSPENSION

1 0

**

*DATE-02/07/83 NAME

*LID -

AGENCY-BR CITY COURT PROB

STATUS COUNTS CNV DISP NOTE

*CHARGE

PROB

0 0 BEGINS 1-11-83

ENDS 1-11-84

NOT SUPPORTED BY
FINGERPRINTS

END



16
 **** BODY - CHEM, INC. ****
 * P.O. BOX 2589 COLO. SPRGS. CO. 80906 *

DATE: 11, 18, 83

BAKER CITY COURT
 GEORGE WHITE
 PO BOX 1
 BAKER LA 70714

PATIENT:
 AGE: 23
 SPECIMEN DATE: 10, 27, 83
 DATE RECEIVED: 11, 4, 83

ANALYTICO LAB #05-1026
 LAB. WORK # 14801

TRACE ELE. (HAIR) ANALYSIS

TEST	RESULT	BODY-CHEM RANGE	DEGREE OF DEFICIENCY MALE (-10 TO +1)	SUGGESTED OPTIMAL (-3 TO +3)	DEGREE OF EXCESS (+4 TO +10)
------	--------	--------------------	--	------------------------------------	------------------------------------

CA	1503	350 - 620			+ 10
MG	104	41 - 87			+ 6
ZN	164	162 - 215		-2	
CR	4.24	.54 - .6			+ 10 **
CU	162	15.46 - 33.1			+ 10
FE	103	8 - 20			+ 10
MN	9.03	.49 - .8			+ 10 **
K	193	19.52 - 42.06			+ 8
NA	2972	87.53 - 182.59			+ 10 **
LI	.36	.53 - 2.04	-4		
PB	66	0 - 14.5			+ 10
HG	1.1	0 - 1			+ 5
CD	17.9	0 - .86			+ 10 **
AL	71	8 - 17			+ 10
CO	.84	.04 - .36			+ 7
MO	2.85	.07 - .33			+ 10
SN	21	.5 - 1.2			+ 10 **
NI	4.3	.04 - .05			+ 10
AS	4.8	0 - 1.5		1	
SE	.08	.95 - 4.5	-9		
F	125	100 - 185		0	

CRIMINAL RECORD OF

STATE ID #1003617

FBI - #728341T5

BIRTH DATE-10-22-60 PLACE-LA
 RACE-B HGT-5'08" HAIR-DLK FPH-18 M 32 W MORN 20
 SEX-M WGT-150# EYES-BRO I 30 U.OMI

**

*DATE-10/19/78 NAME-
 *LID - 159320 AGENCY-SU BATON ROUGE LA

*CHARGE DISTURBING THE PEACE - JUVENILE
 (CPD BAKER)

**
 *DATE-05/07/79 NAME -
 *LID - 164394 AGENCY-SO BATON ROUGE LA
 DISTURBING THE PEACE STATUS COUNTS DISP
 (BAKER PD) ; 1 0

*DATE-06/01/79 NAME -
 *LID - 164953 AGENCY-SO BATON ROUGE LA
 DISTURBING THE PEACE STATUS COUNTS DISP

*DATE-09/13/79 NAME -
 *LID - 167534 AGENCY-SO BATON ROUGE LA

*CHARGE AGGRAVATED BATTERY STATUS COUNTS DISP
 **

*DATE-12/22/79 NAME -
 *LID - 170089 AGENCY-SO BATON ROUGE LA
 *CHARGE STATUS COUNTS DISP

S-CRIM. DAMAGE TO PROPERTY
 REMAIN. IN PLACE
 AFTER BEING FOR-
 -BIDDEN
 CBAKE

DISP
 DECLINED TO PROS
 12-28-78 NO
 FORMAL CHARGE

DIVISION OF STATE POLICE
BUREAU OF IDENTIFICATION
BATON ROUGE

Louisiana State Po
Bureau of Criminal Ident
Baton Rouge, Louis

Two 11-10

The following is the record of State Police No..... 737 702
F. B. I. No. 764 038 H

CONTRIBUTOR OF FINGERPRINTS	NAME AND NUMBER	ARREST OR RECEIVED	CHARGE	DISPOSITION
1. Baton Rouge, La		10-11-77	poss w/int to dist cocaine (E3RSO) #22494	5-19-78 P.G. to of Cocaine 10-6 LDC - 3yrs.- CF
2. SPen Angola, La.		9-14-78	Poss. of Cocaine w/Int. to Dist. Parole Viol.(Dist. of Mariju.)	3 Years CC w/Bal 5 years Discharged 2- GT.

Since neither fingerprints nor an identifying number which is contained in our files accompanied your request, Louisiana Bureau of Identification cannot guarantee in any manner that this material concerns the individual in whom you are interested.

NOTICE

DISSEMINATION OF INFORMATION OBTAINED FROM LOUISIANA STATE POLICE RAP SHEETS AND LOUISIANA STATE POLICE CRIMINAL RECORDS FILES TO AGENCIES OTHER THAN CRIMINAL JUSTICE AGENCIES IS NOT AUTHORIZED BY THE STATE POLICE AND THAT PERSON AND AGENCY MAKING SUCH DISSEMINATION MUST ASSUME FULL RESPONSIBILITY FOR ANY UNAUTHORIZED DISSEMINATION.

Upon completion of our records, please supply disposition to this Department in any of the foregoing cases where it does not appear
SSP 3709 * Represents notations unsupported by fingerprints.



DEPARTMENT OF PUBLIC SAFETY
DIVISION OF STATE POLICE
BUREAU OF IDENTIFICATION
BATON ROUGE

The following is the record of State Police No. 737-702.....
F. B. I. No. 761, 038 II

LA. PEN FILE
NO. 33-8

Louisiana State Po.
Bureau of Criminal Identit,
Baton Rouge, Louisi

CONTRIBUTOR OF FINGERPRINTS	NAME AND NUMBER	ARREST OR RECEIVED	CHARGE	DISPOSITION
P.D Baton Rouge La		1-29-70	Theft by shoplifting	
SO Oberlin La		10-27-70	Poss marijuana	1 yr Prob 5-22-72 til
W Baton Rouge La		9-8-71	Poss with intent to distribute hashish	
Baton Rouge, La.		10-25-72	poss. marij. driv under influence Marij	
Baton Rouge, La.		4-4-73	Distr. marijuana	
ton Rouge, La		4-16-73	dist of controlled substance (Marij)	1 yr. Prob. on Poss. Marij. S
Of Narc And Otherprists. not as ng Drugs. and identifying number whi- sh identifying number whi- dexed in our files accom- request, Louisiana Rep. #770581 tive who can be contact for any Pen gola La the individual in whom #770581 interested.		4-4-73	marij-sa	1 yr. Prob. on Poss. Marij. S
		7-25-74	dist marij	5 yrs paroled 12-17-75 exp 4-17-79
			If arrested prior to 5-22-73 notify Chief Prob & Parole Office Baton Rouge La per inf rec 9-20-72.	

If arrested prior to 5-22-73 notify Chief Prob & Parole Office
Baton Rouge La per inf rec 9-20-72.

b Represents notations unsupported by fingerprints.